FIG.1A

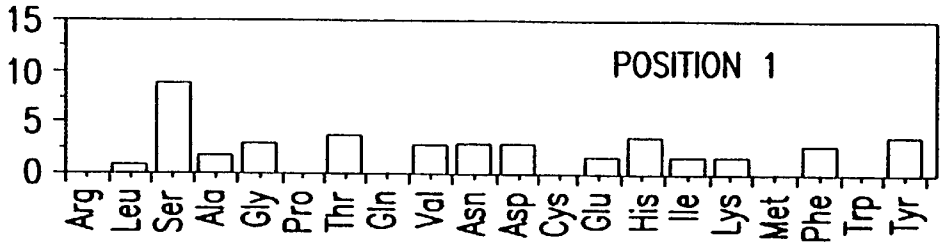


FIG.1B

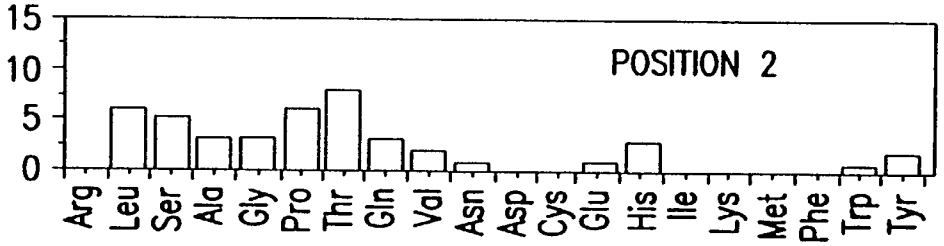


FIG.1C

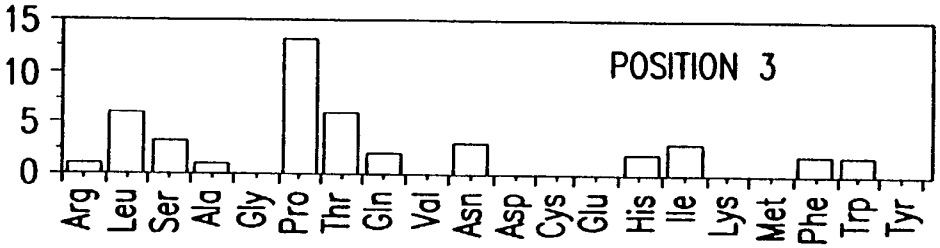


FIG.1D

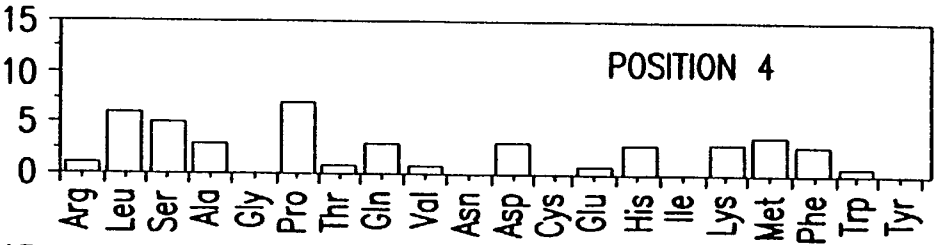


FIG.1E

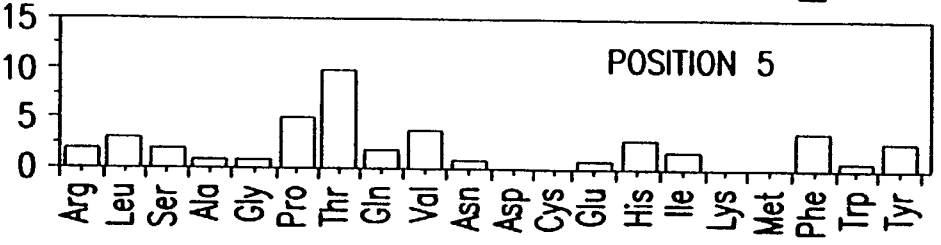
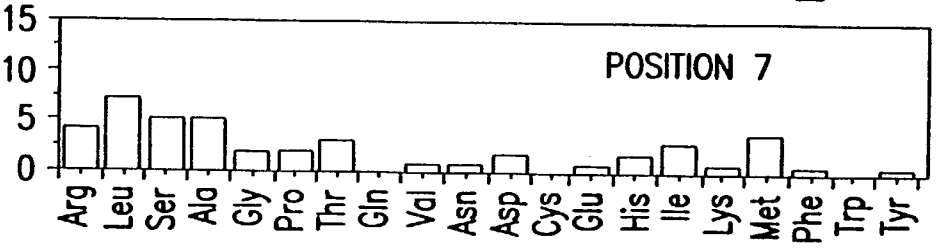


FIG.1F

FIG.1G



His	Thr	Thr	Val	Tyr	Gly	Ala	Gly
CAT	ACG	ACT	GTT	TAT	GGG	GCT	GGT
Thr	Glu	Thr	Pro	Tyr	Pro	Thr	Gly
ACT	GAG	ACG	CCT	TAT	CCT	ACT	GGT
Leu	Thr	Thr	Pro	Phe	Ser	Ser	Gly
CTT	ACT	ACT	CCG	TTT	TCG	TCG	GGT
Gly	Val	Pro	Leu	Thr	Met	Asp	Gly
GGT	GTG	CCT	CTT	ACG	ATG	GAT	GGT
Lys	Leu	Pro	Thr	Val	Leu	Arg	Gly
AAG	CTT	CCG	ACT	GTT	CTG	CGG	GGT
Cys	Arg	Phe	His	Gly	Asn	Arg	Gly
TGT	CGC	TTT	CAT	GGG	AAT	CGT	GGT
Tyr	Thr	Arg	Asp	Phe	Glu	Ala	Gly
TAT	ACT	CGG	GAT	TTT	GAG	GCT	GGT
Ser	Ser	Ala	Ala	Gly	Pro	Arg	Gly
TCG	TCG	GCG	GCT	GGT	CCG	CGG	GGT
Ser	Leu	Ile	Gln	Tyr	Ser	Arg	Gly
TCT	CTG	ATT	CAG	TAT	TCG	AGG	GGT
Asp	Ala	Leu	Met	Trp	Pro	UKN	Gly
GAT	GCT	CTT	ATG	TGG	CCT	NTG	GGT
Ser	Ser	UKN	Ser	Leu	Tyr	Ile	Gly
TCG	TCT	CNT	TCG	TTG	TAT	ATT	GGT
Phe	Asn	Thr	Ser	Thr	Arg	Thr	Gly
TTT	AAT	ACT	TCG	ACG	CGT	ACG	GGT
Thr	Val	Gln	His	Val	Ala	Phe	Gly
ACT	GTG	CAG	CAT	GTT	GCT	TTT	GGT
Asp	Tyr	Ser	Phe	Pro	Pro	Leu	Gly
GAT	TAT	TCT	TTT	CCG	CCT	CTT	GGT
Val	Gly	Ser	Met	Glu	Ser	Leu	Gly
GTG	GGG	TCT	ATG	GAG	TCG	TTG	GGT
Phe	UKN	Pro	Met	Ile	UKN	Ser	Gly
TTT	CAN	CCG	ATG	ATT	NGN	TCG	GGT
Ala	Pro	Pro	Arg	Val	Thr	Met	Gly
GCG	CCT	CCG	CGG	GTT	ACT	ATG	GGT

FIG.1H

Ile Ala Thr Lys Thr Pro Lys Gly
ATT GCT ACG AAG ACG CCT AAG GGT

Lys Pro Pro Leu Phe Gln Ile Gly
AAG CCT CCG TTG TTT CAG ATT GGT

Tyr His Thr Ala His Asn Met Gly
TAT CAT ACT GCT CAT AAT ATG GGT

Ser Tyr Ile Gln Ala Thr His Gly
TCT TAT ATT CAG GCT ACG CAT GGT

Ser Ser Phe Ala Thr Phe Leu Gly
TCG TCT TTT GCT ACT TTT CTT GGT

Thr Thr Pro Pro Asn Phe Ala Gly
ACG ACT CCG CCG AAT TTT GCG GGT

Ile Ser Leu Asp Pro Arg Met Gly
ATT TCT CTT GAT CCG CGT ATG GGT

Ser Leu Pro Leu Phe Gly Ala Gly
TCG CTG CCG CTG TTT GGT GCG GGT

Asn Leu Leu Lys Thr Thr Leu Gly
AAT CTT CTT AAG ACT ACG CTT GGT

Asp Gln Asn Leu Pro Arg Arg Gly
GAT CAG AAT CTG CCG CGG CGG GGT

Ser His Phe Glu Gln Leu Leu Gly
AGT CAT TTT GAG CAG CTG CTT GGT

Thr Pro Gln Leu His His Gly Gly
ACG CCG CAG CTT CAT CAT GGT GGT

Ala Pro Leu Asp Arg Ile Thr Gly
GCG CCT CTG GAT AGG ATT ACG GGT

Phe Ala Pro Leu Ile Ala His Gly
TTT GCG CCT CTT ATT GCG CAT GGT

Ser Trp Ile TER Thr Phe Met Gly
TCG TGG ATT TAG ACG TTT ATG GGT

Asn Thr Trp Pro His Met Tyr Gly
AAT ACT TGG CCT CAT ATG TAT GGT

Glu Pro Leu Pro Thr Thr Leu Gly
GAG CCT CTT CCG ACT ACG TTG GGT

His Gly Pro His Leu Phe Asn Gly
CAT GGG CCT CAT CTG TTT AAT GGT

FIG.11

Tyr Leu Asn Ser Thr Leu Ala Gly
TAT CTG AAT TCT ACG CTT GCT GGT

His Leu His Ser Pro Ser Gly Gly
CAT CTT CAT AGT CCG TCG GGG GGT

FIG.1J

FIG.2A

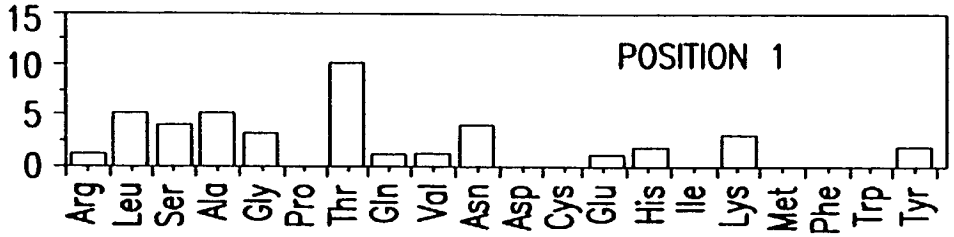


FIG.2B

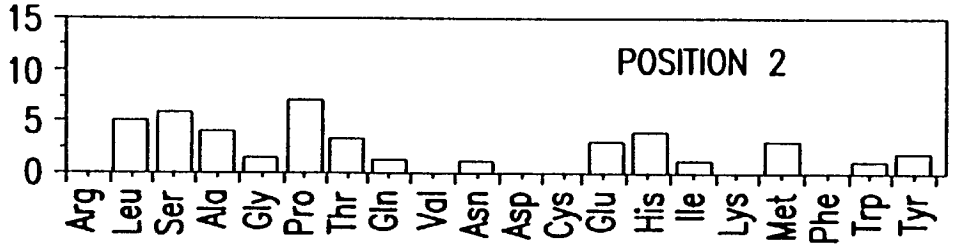


FIG.2C

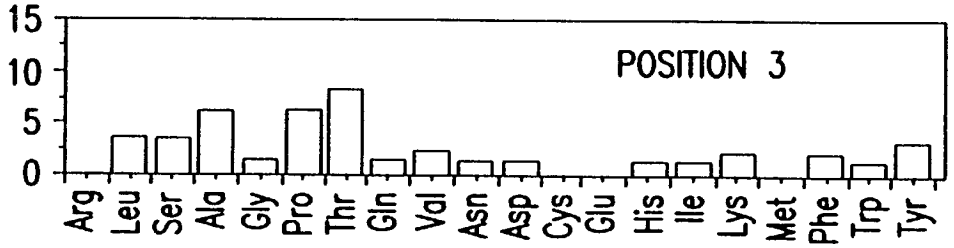


FIG.2D

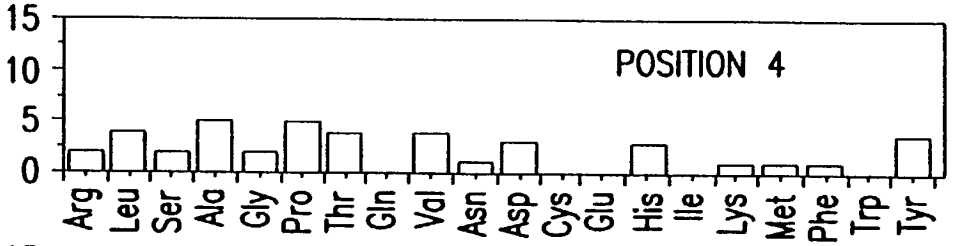


FIG.2E

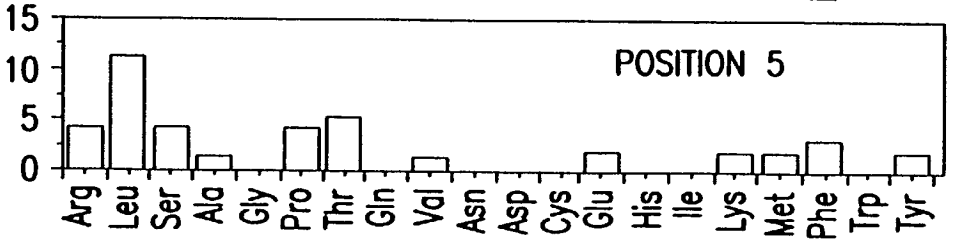


FIG.2F

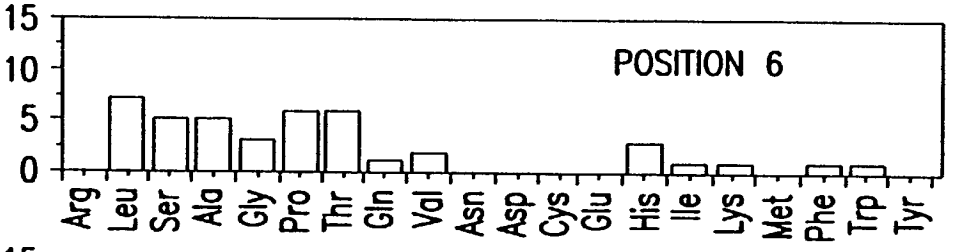
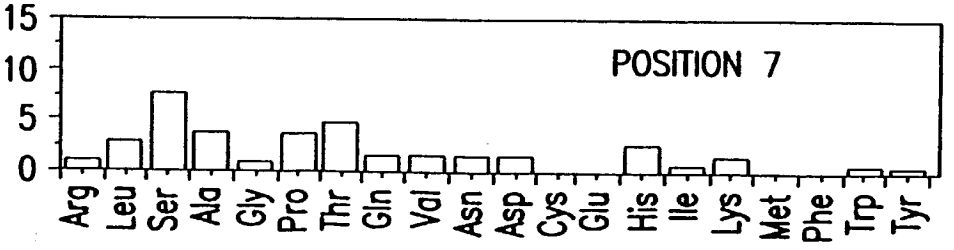


FIG.2G



Thr Leu Pro His Arg Leu Asn Gly
ACT CTG CCT CAT CGT CTG AAT GGT

Ser Ser Pro Arg Glu Val His Gly
TCG AGT CCG AGG GAG GTT CAT GGT

Asn Gln Val Asp Thr Ala Arg Gly
AAT CAG GTT GAT ACG GCT CGG GGT

Tyr Pro Thr Pro Leu Leu Thr Gly
TAT CCT ACG CCG CTG CTG ACT GGT

His Pro Ala Ala Phe Pro Trp Gly
CAT CCT GCT GCT TTT CCT TGG GGT

Leu leu Pro His Ser Ser Ala Gly
CTT CTT CCG CAT TCT AGT GCT GGT

Leu Glu Thr Tyr Thr Ala Ser Gly
CTT GAG ACT TAT ACG GCT TCT GGT

Lys Tyr Val Pro Leu Pro Pro Gly
AAG TAT GTG CCT CTG CCG CCG GGT

Ala Pro Leu Ala Leu His Ala Gly
GCG CCG TTG GCT CTG CAT GCG GGT

Tyr Glu Ser Leu Leu Thr Lys Gly
TAT GAG TCG CTG CTG ACT AAG GGT

Ser His Ala Ala Ser Gly Thr Gly
TCT CAT GCG GCT TCT GGT ACT GGT

Gly Leu Ala Thr Val Lys Ser Gly
GGT TTG GCG ACT GTT AAG TCT GGT

Gly Ala Thr Ser Phe Gly Leu Gly
GGT GCT ACG TCT TTT GGG CTT GGT

Lys Pro Pro Gly Pro Val Ser Gly
AAG CCG CCT GGG CCG GTG TCG GGT

Thr Leu Tyr Val Ser Gly Asn Gly
ACT CTT TAT GTT TCT GGG AAT GGT

His Ala Pro Phe Lys Ser Gln Gly
CAT GCT CCG TTT AAG TCT CAG GGT

Val Ala Phe Thr Arg Leu Pro Gly
GTG GCG TTT ACG CGG CTT CCG GGT

FIG.2H

Leu Pro Thr Arg Thr Pro Ala Gly
CTG CCG ACT CGT ACG CCG GCT GGT

Ala Ser Phe Asp Leu Leu Ile Gly
GCG AGT TTT GAT CTT TTG ATT GGT

Arg Met Asn Thr Glu Pro Pro Gly
CGG ATG AAT ACT GAG CCT CCG GGT

Lys Met Thr pro Leu Thr Thr Gly
AAG ATG ACT CCT CTG ACG ACT GGT

Ala Asn Ala Thr Pro Leu Leu Gly
GCG AAT GCG ACG CCT CTG CTG GGT

Thr Ile Trp Pro Pro Pro Val Gly
ACT ATT TGG CCT CCG CCT GTT GGT

Gln Thr Lys Val Met Thr Thr Gly
CAG ACT AAG GTG ATG ACG ACG GGT

Asn His Ala Val Phe Ala Ser Gly
AAT CAT GCT GTT TTT GCT AGT GGT

Leu His Ala Ala UKN Thr Ser Gly
CTG CAT GCG GCT ANT ACG TCG GGT

Thr Trp Gln Pro Tyr Phe His Gly
ACG TGG CAG CCG TAT TTT CAT GGT

Ala Pro Leu Ala Leu His Ala Gly
GCG CCG TTG GCT CTG CAT GCG GGT

Thr Ala His Asp Leu Thr Val Gly
ACG GCG CAT GAT CTG ACT GTT GGT

Asn Met Thr Asn Met Leu Thr Gly
AAT ATG ACT AAT ATG CTT ACT GGT

Gly Ser Gly Leu Ser Gln Asp Gly
GGT TCT GGG CTG TCT CAG GAT GGT

Thr Pro Ile Lys Thr Ile Tyr Gly
ACG CCG ATT AAG ACG ATT TAT GGT

Ser His Leu Tyr Arg Ser Ser Gly
TCG CAT CTG TAT CGT TCT AGT GGT

FIG.21

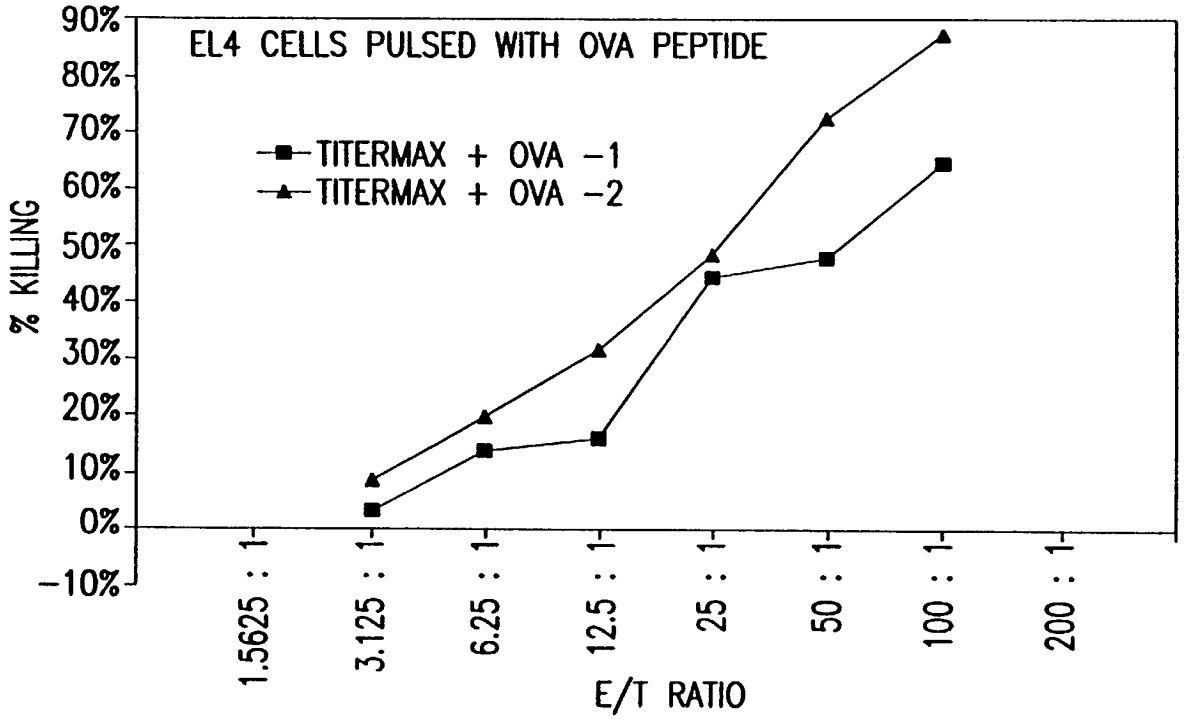


FIG. 3A

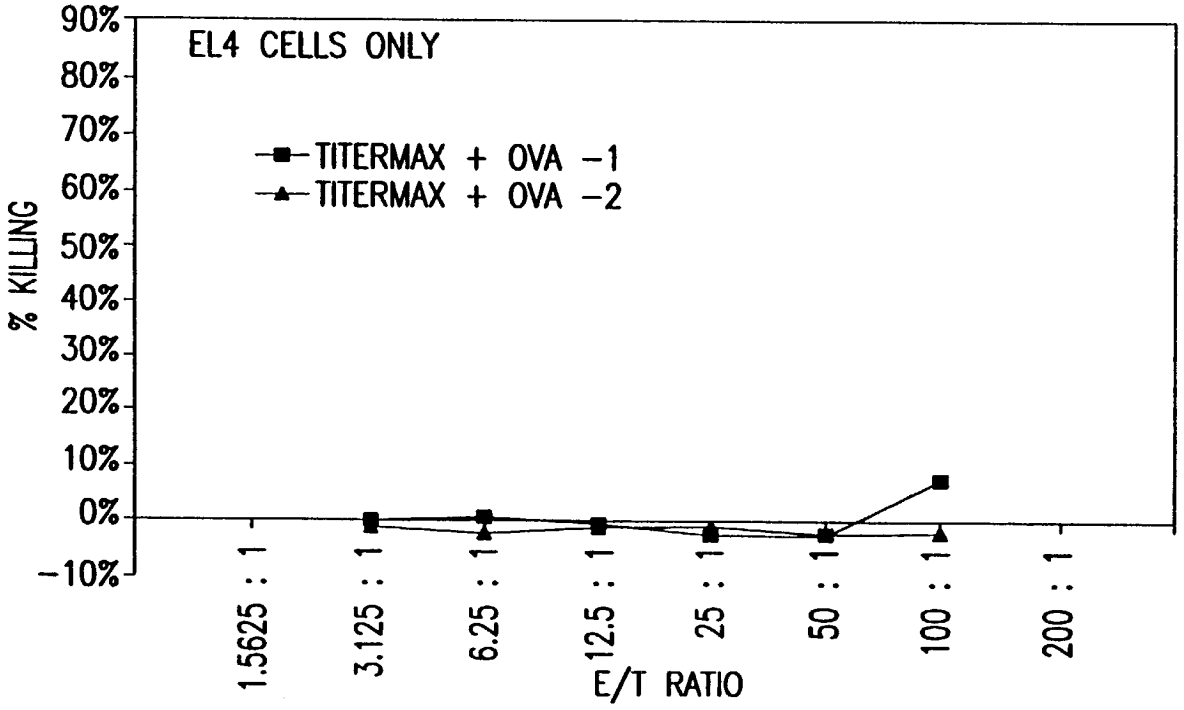


FIG. 3B

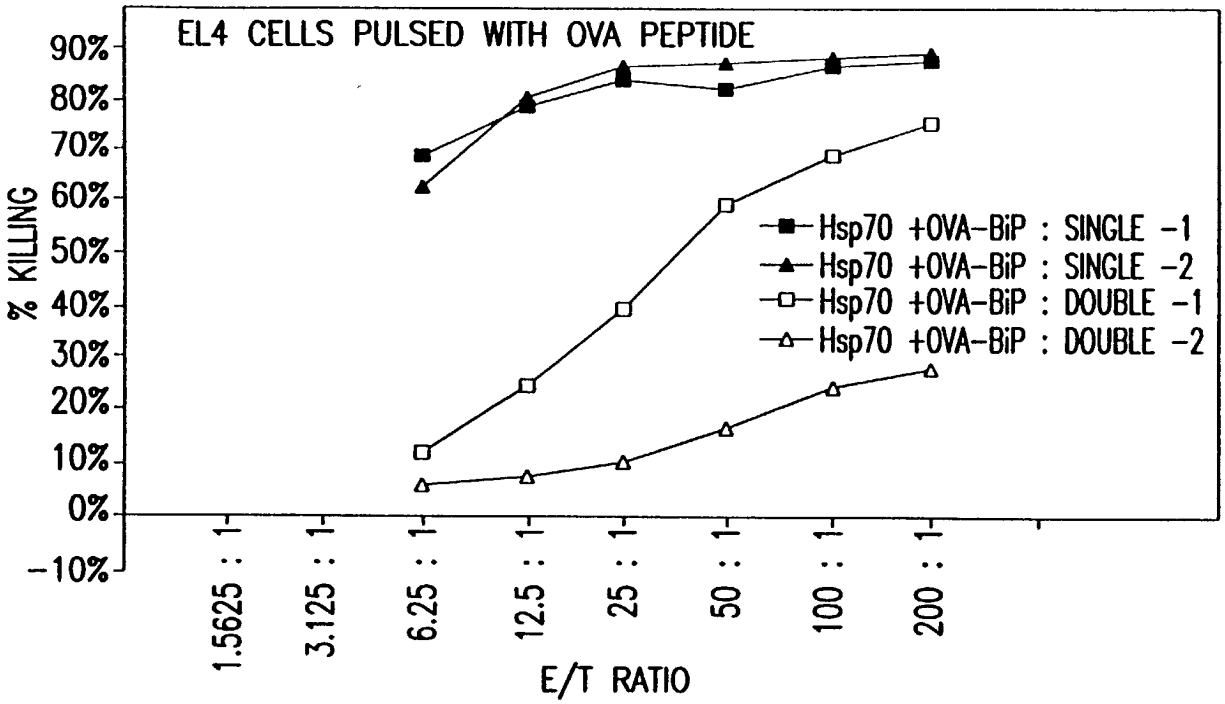


FIG.4A

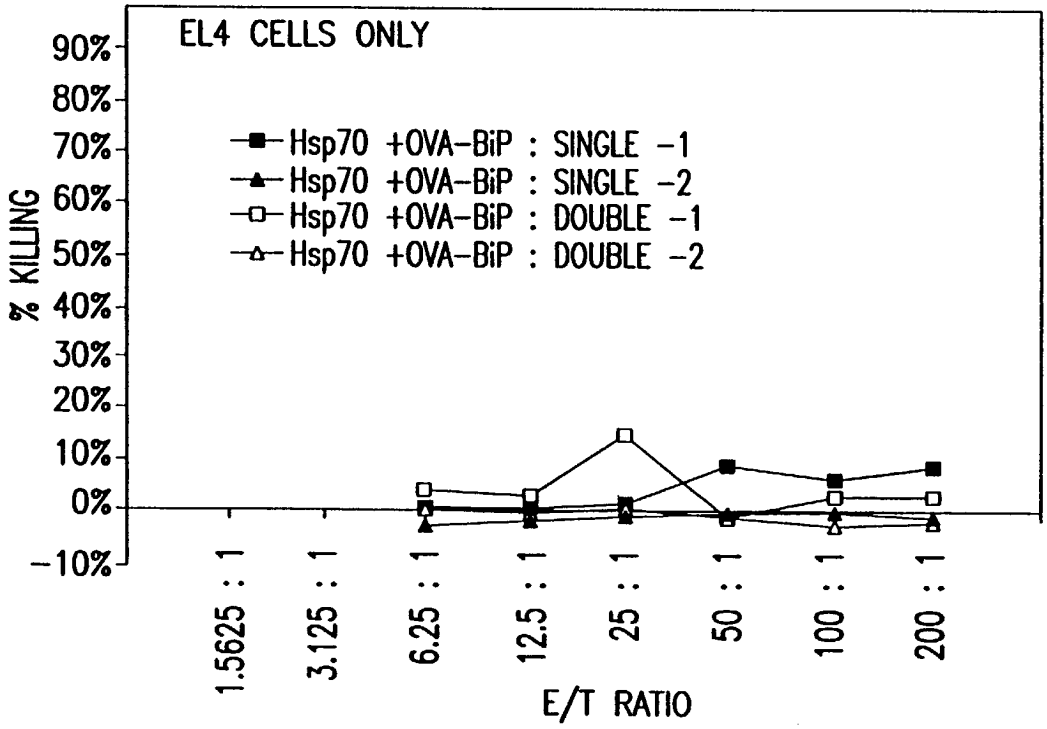


FIG.4B

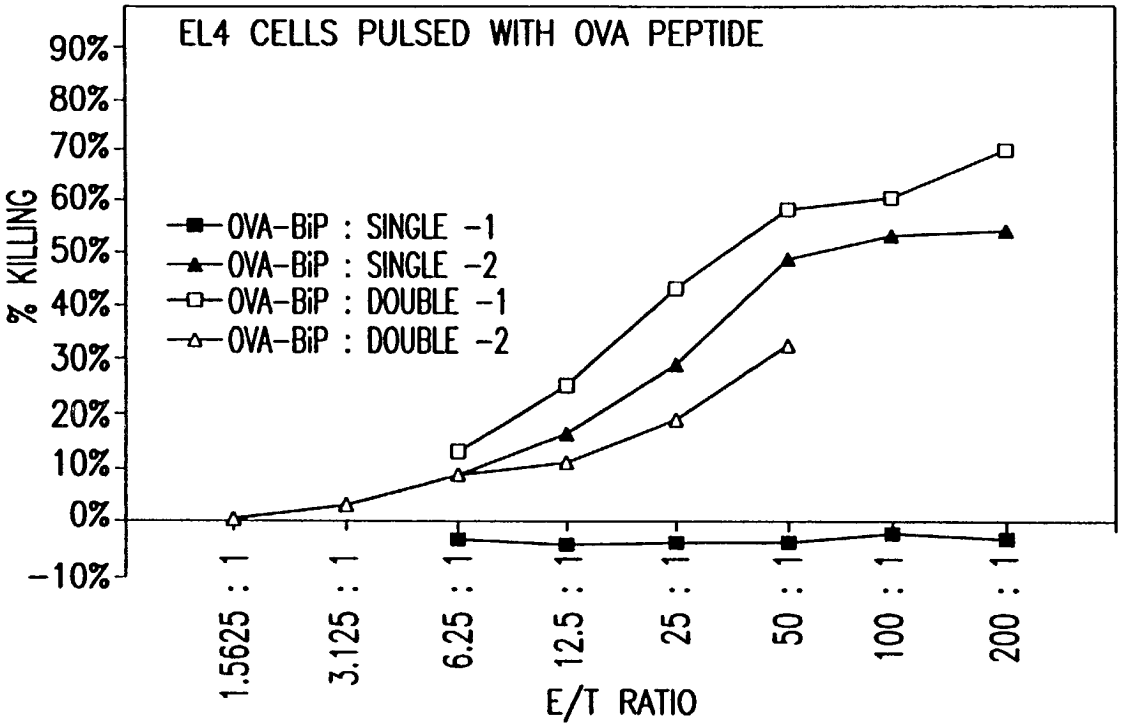


FIG.5A

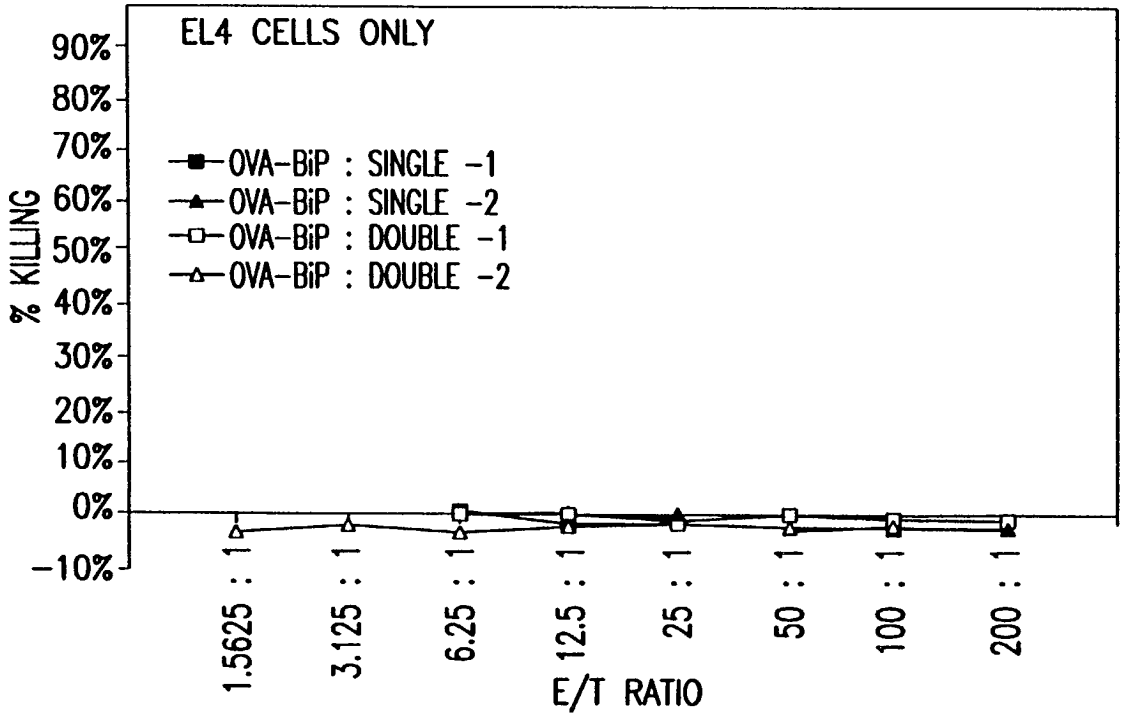


FIG.5B

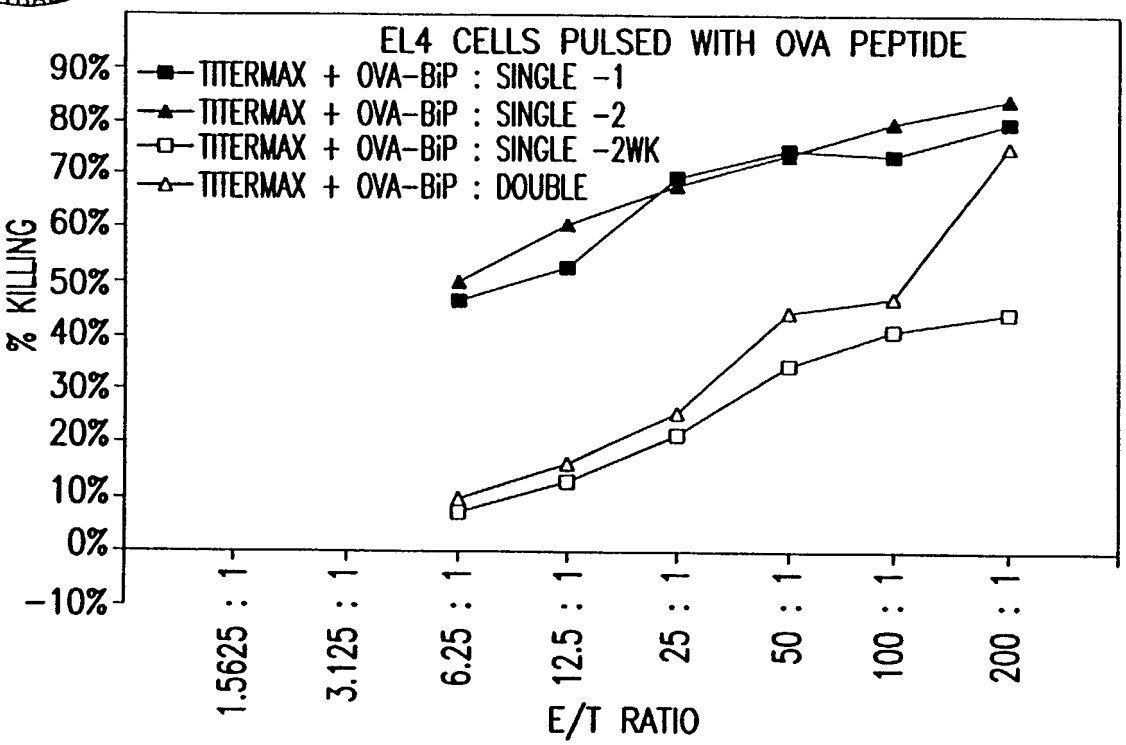


FIG.6A

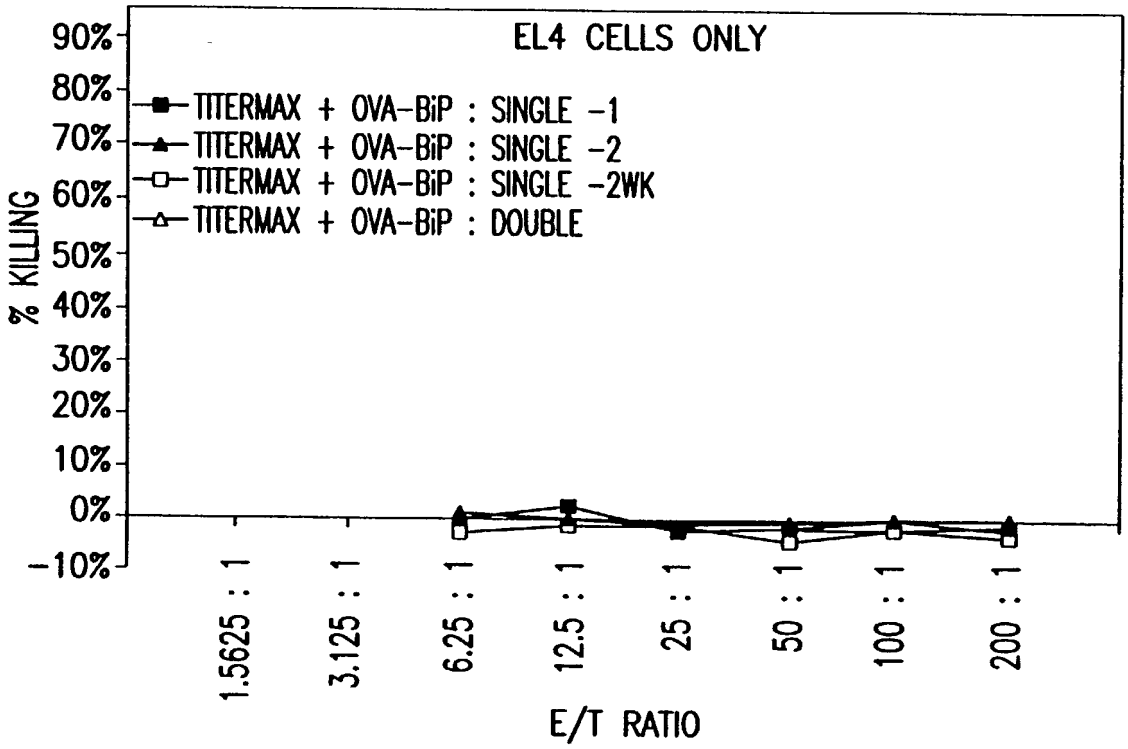


FIG.6B

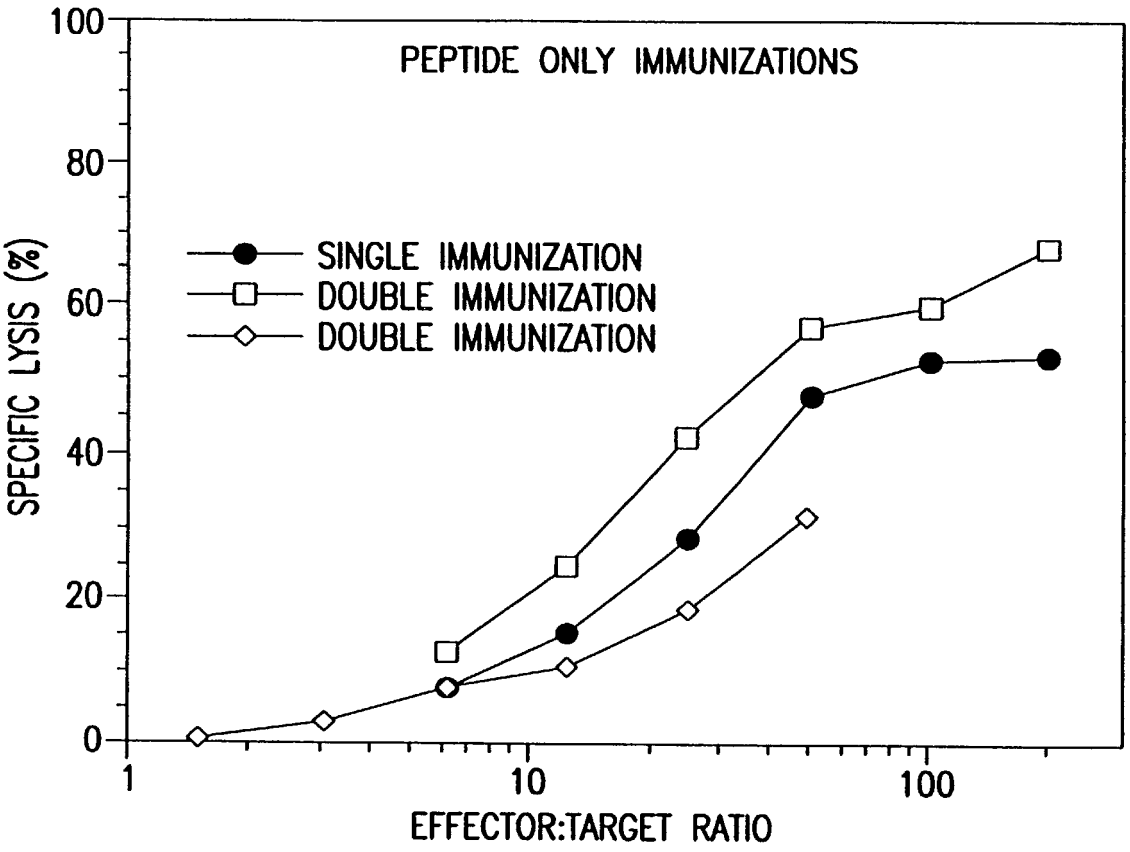


FIG.7

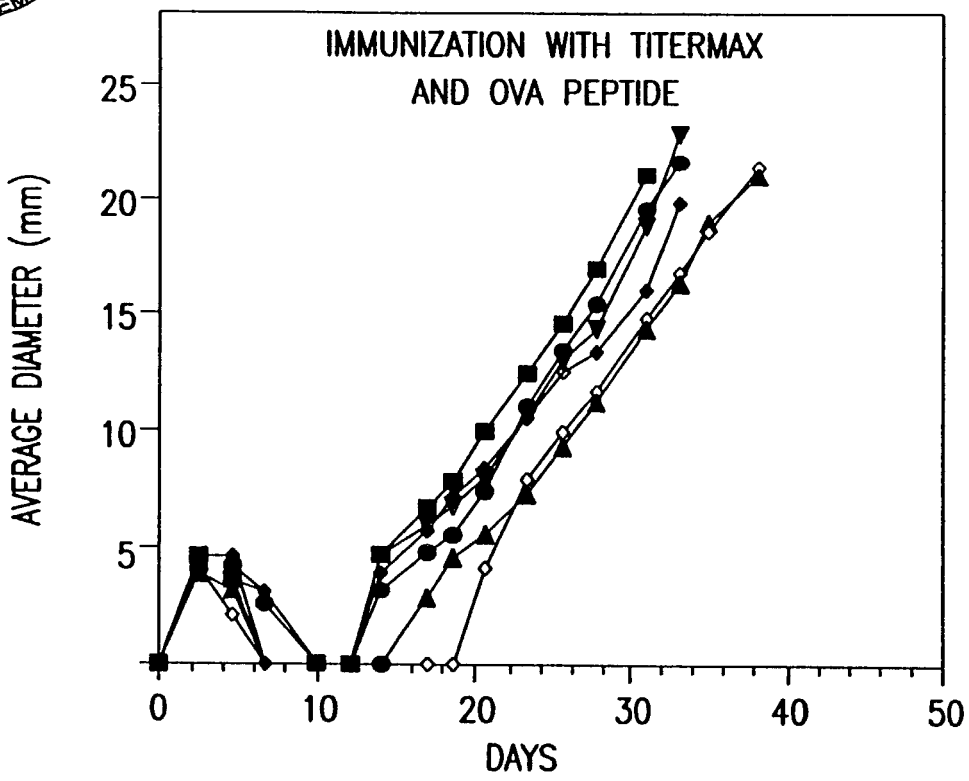


FIG.8A

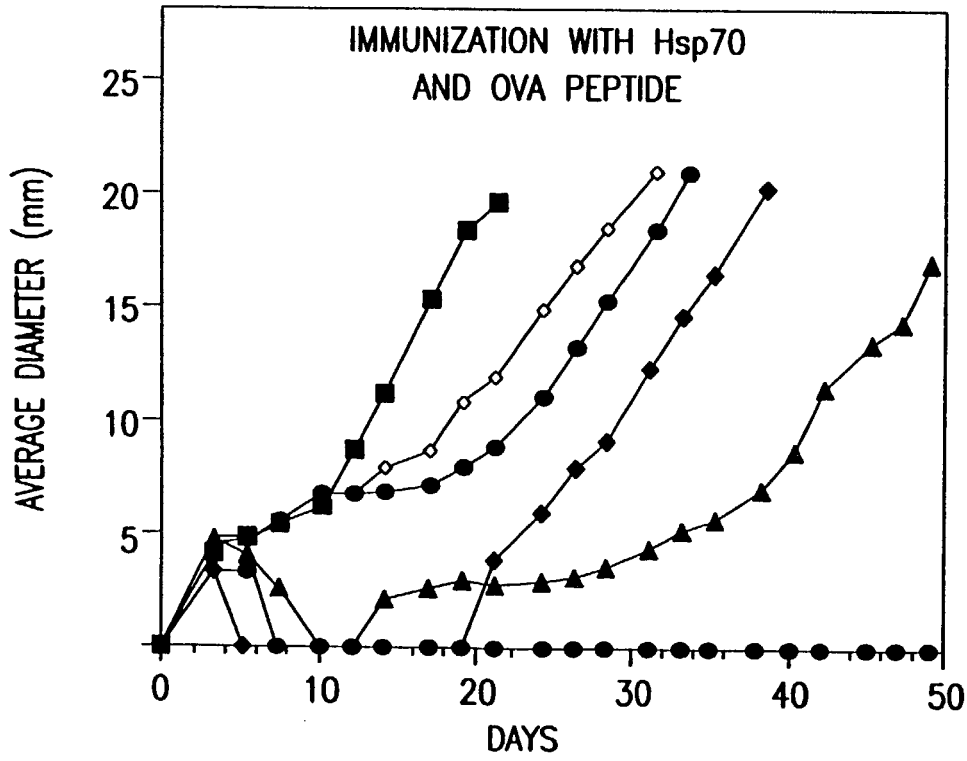


FIG.8B

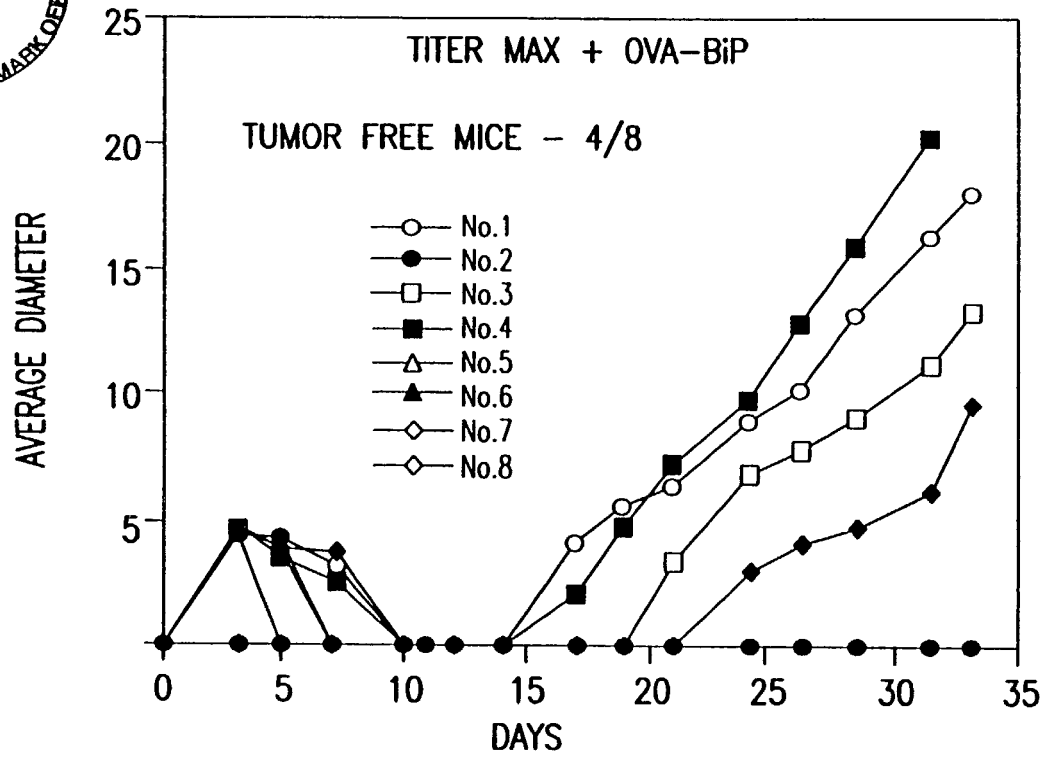


FIG.8C

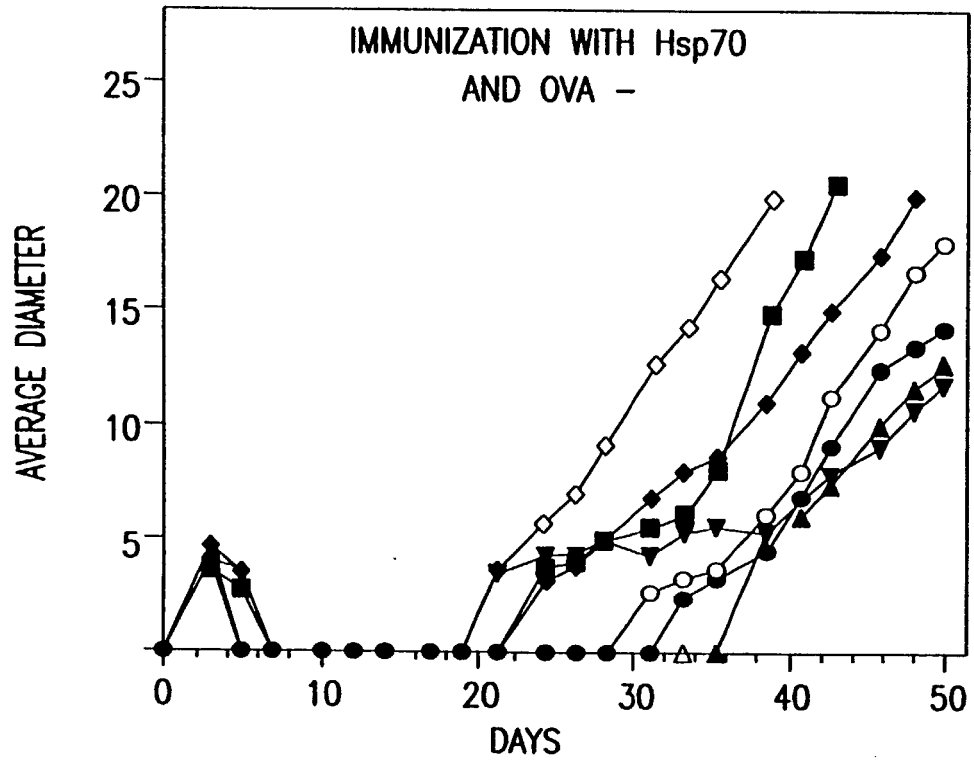


FIG.8D

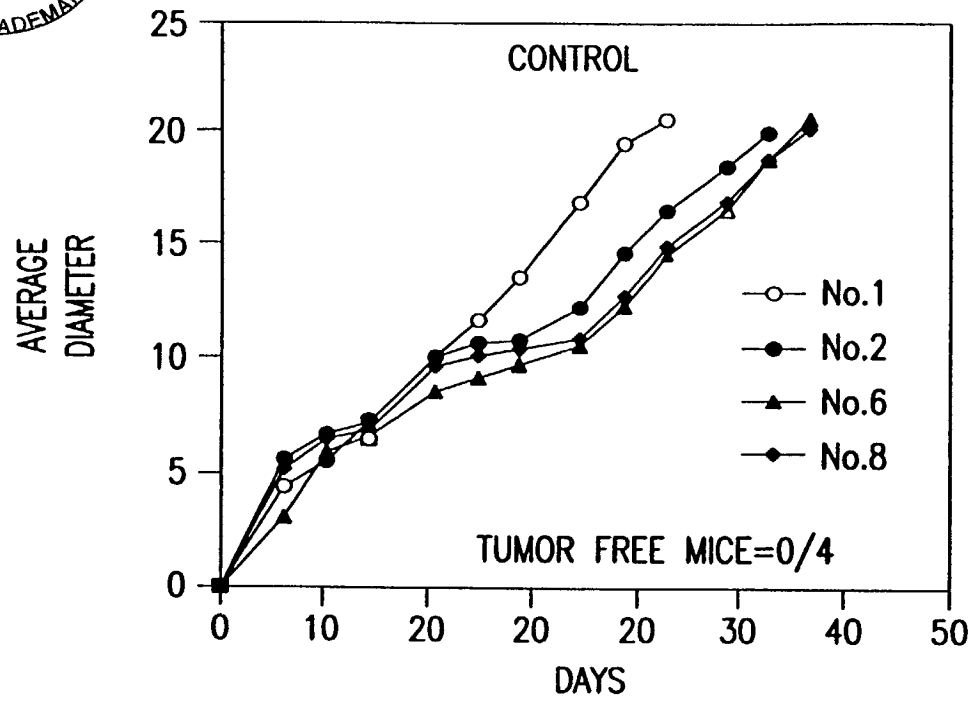


FIG.8E

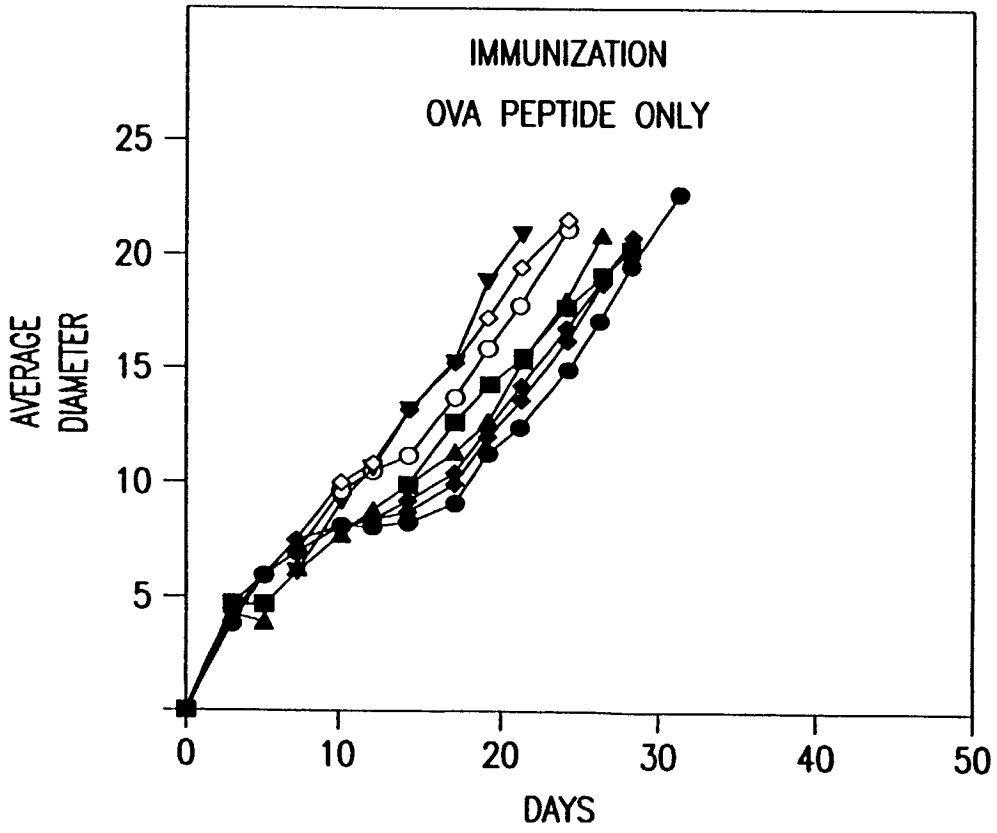


FIG.8F

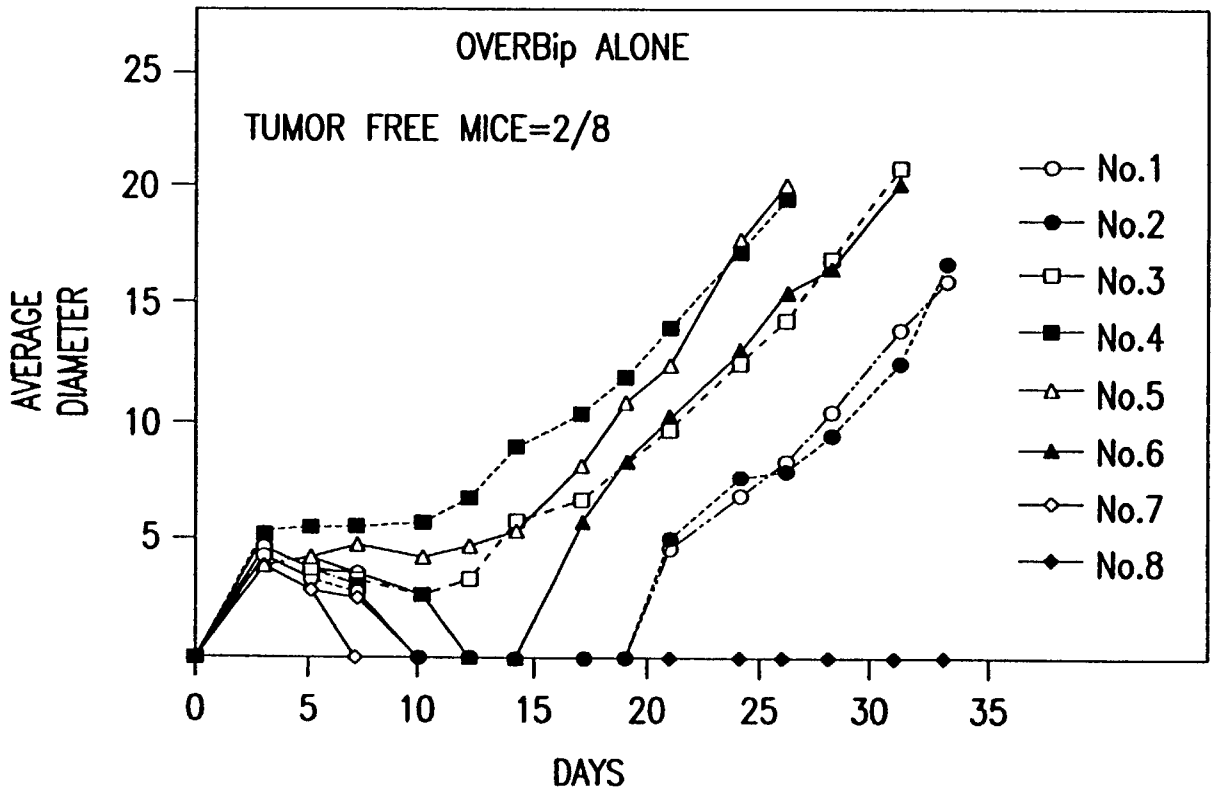


FIG.8G

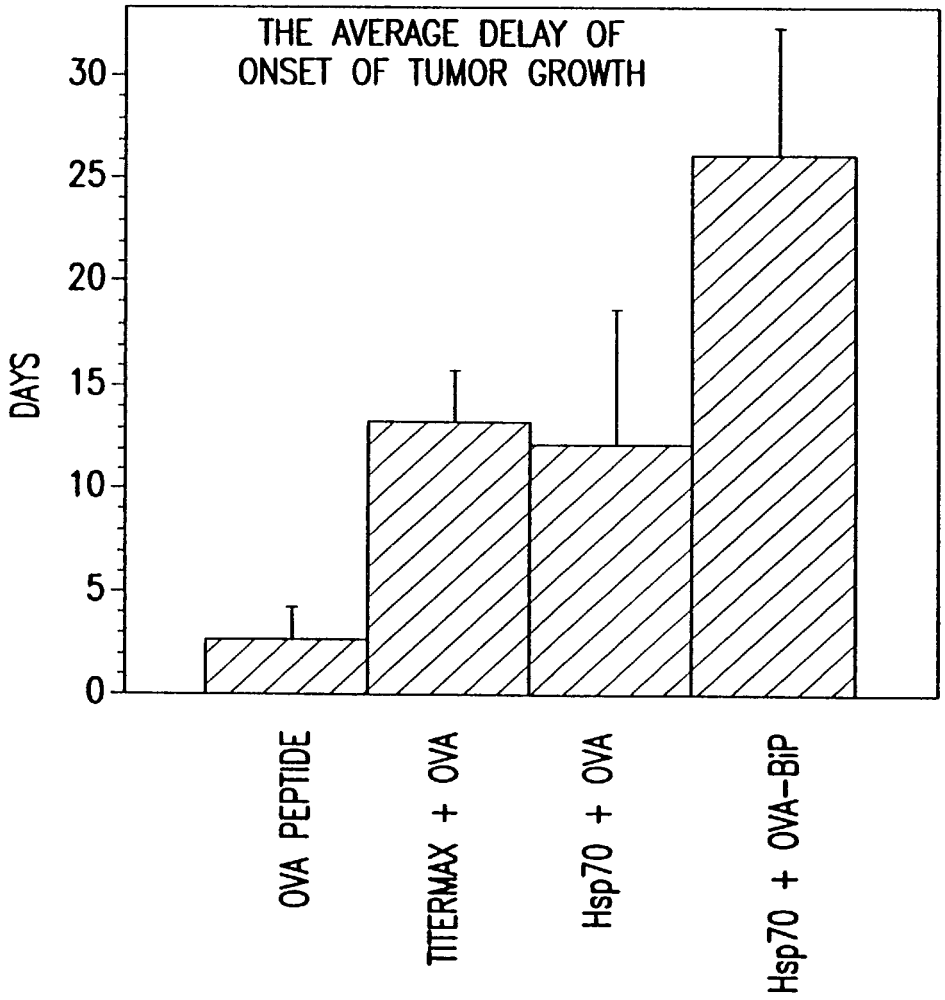


FIG.8H

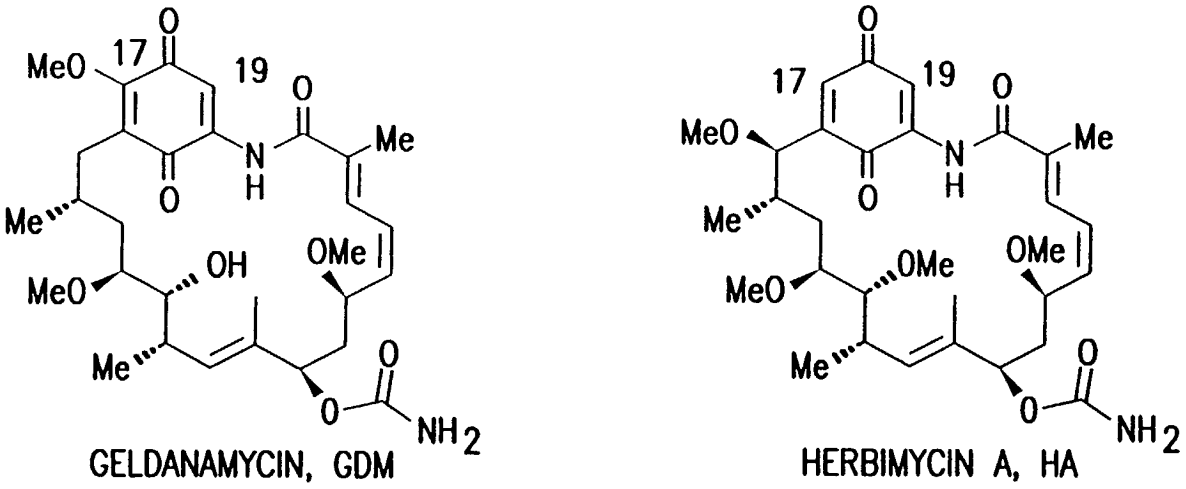


FIG.9A

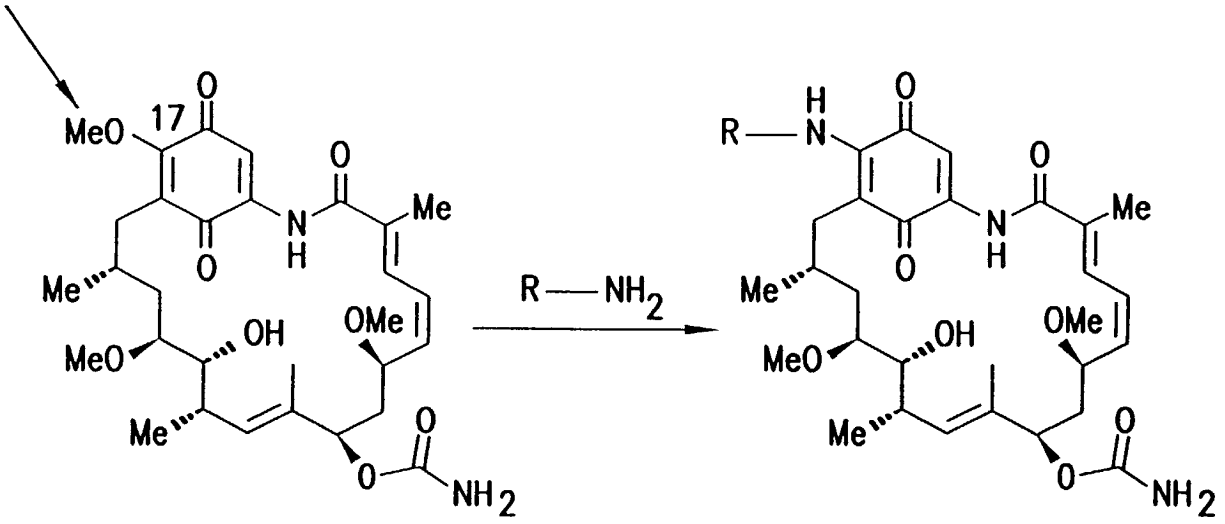
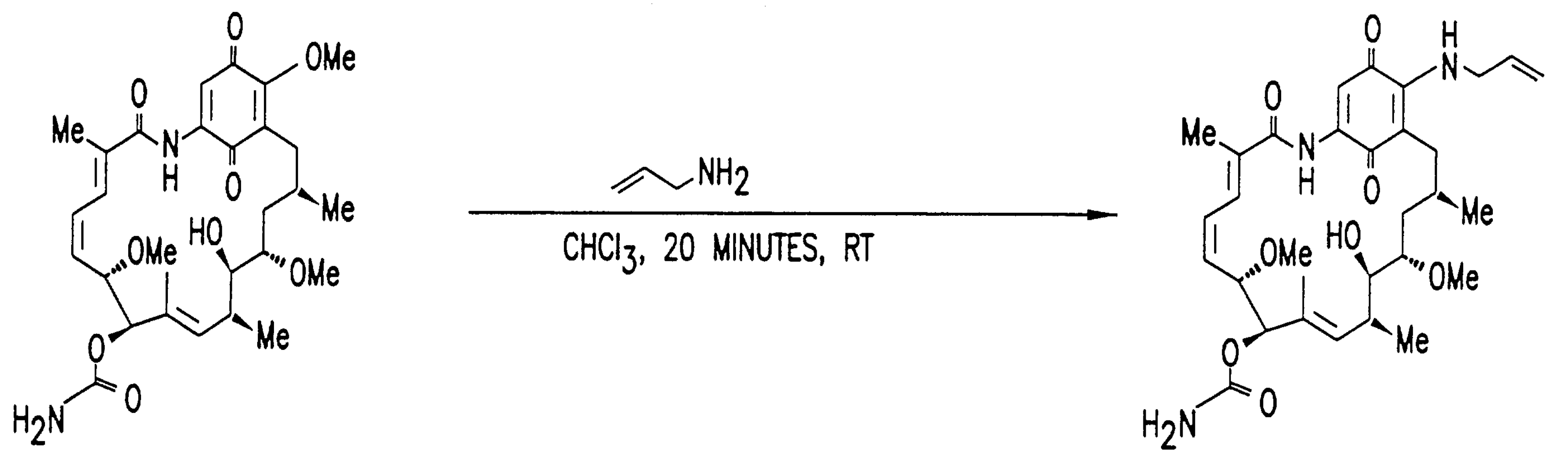
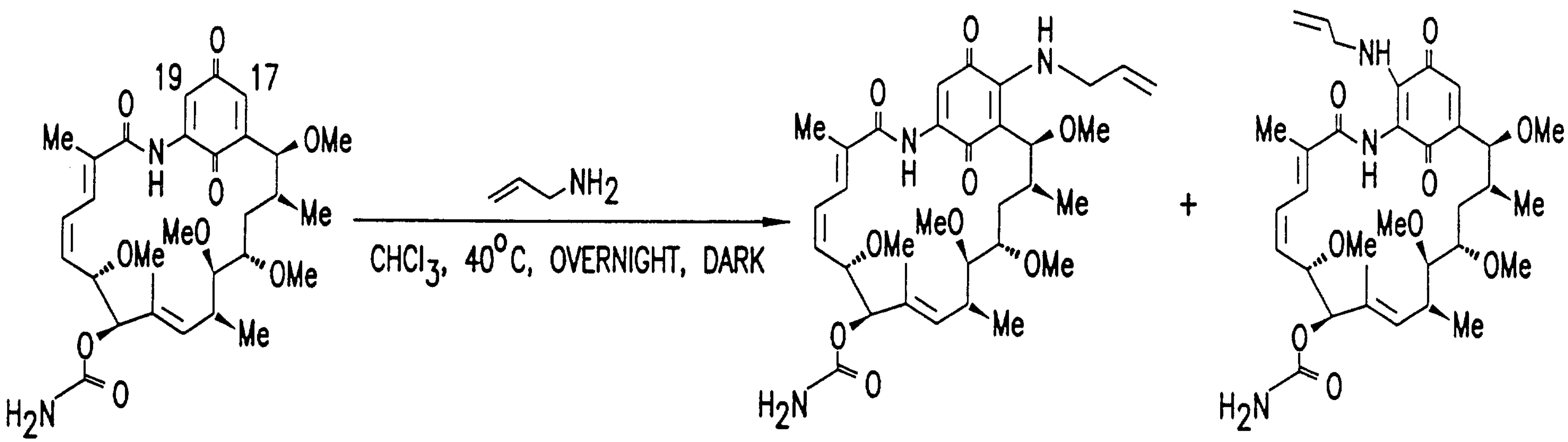


FIG.9B



GDM

17–ALLYIAMINO–17–DEMETHOXY GDM

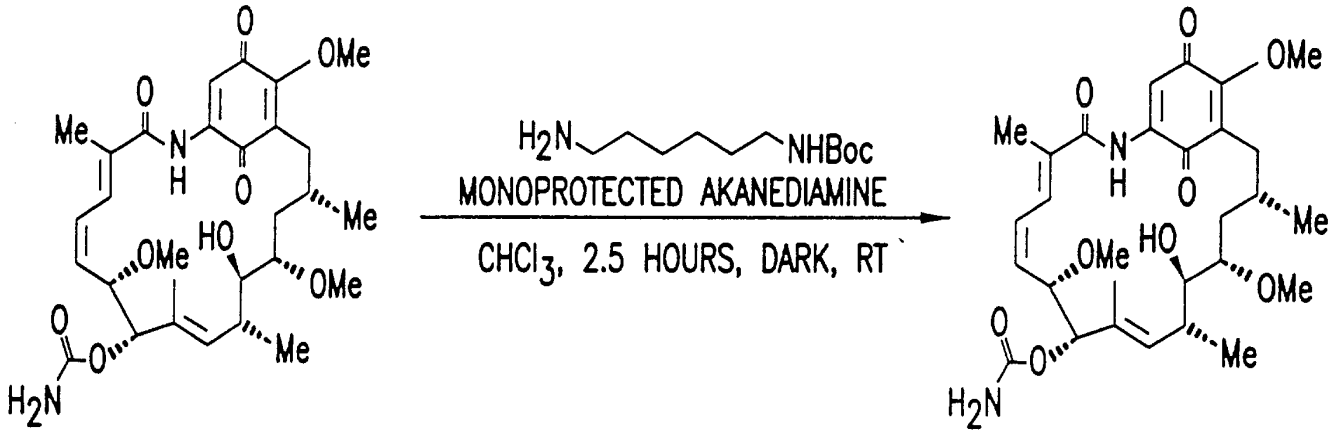


HERBIMYCIN A, HA

17–ALLYIAMINO HA
30% YIELD

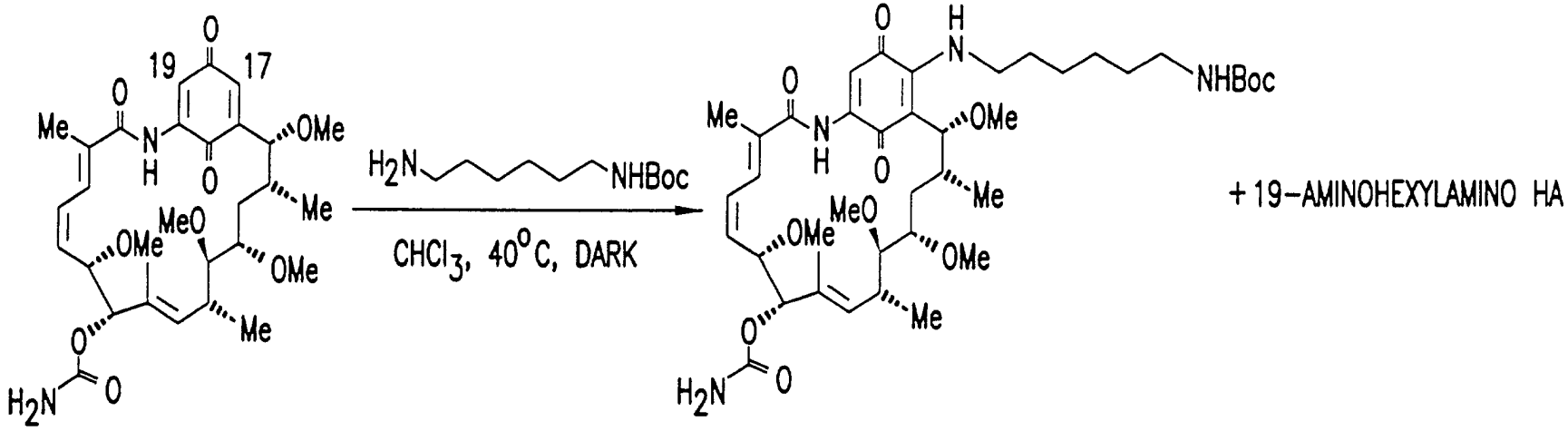
19–ALLYIAMINO HA
20% YIELD

FIG. 9C



GELDANAMYCIN, GDM

AMINOTETHERED GDM



HERBIMYCIN A, HA

17-AMINOHEXYLAMINO HA

FIG.9D

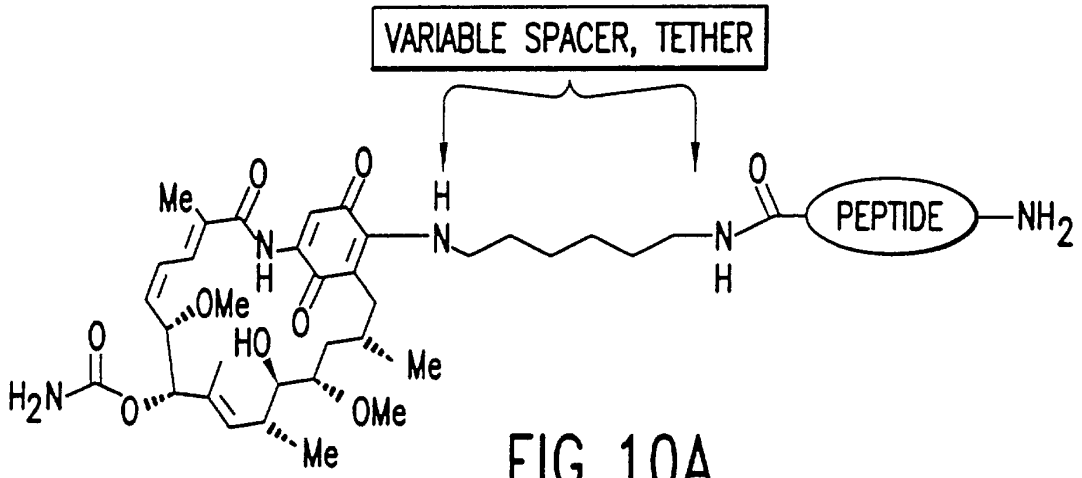


FIG. 10A

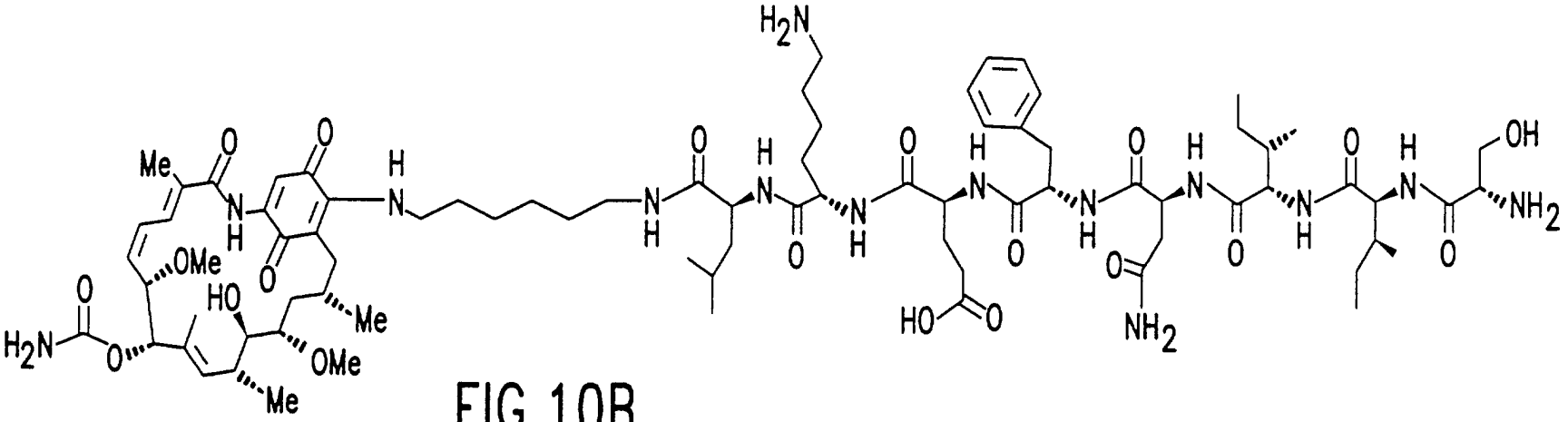


FIG. 10B

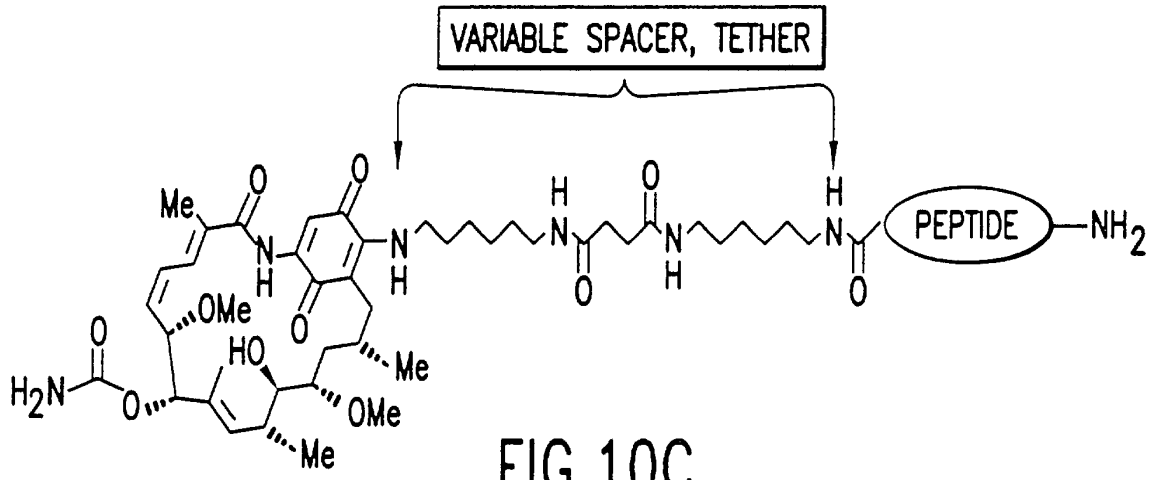


FIG.10C

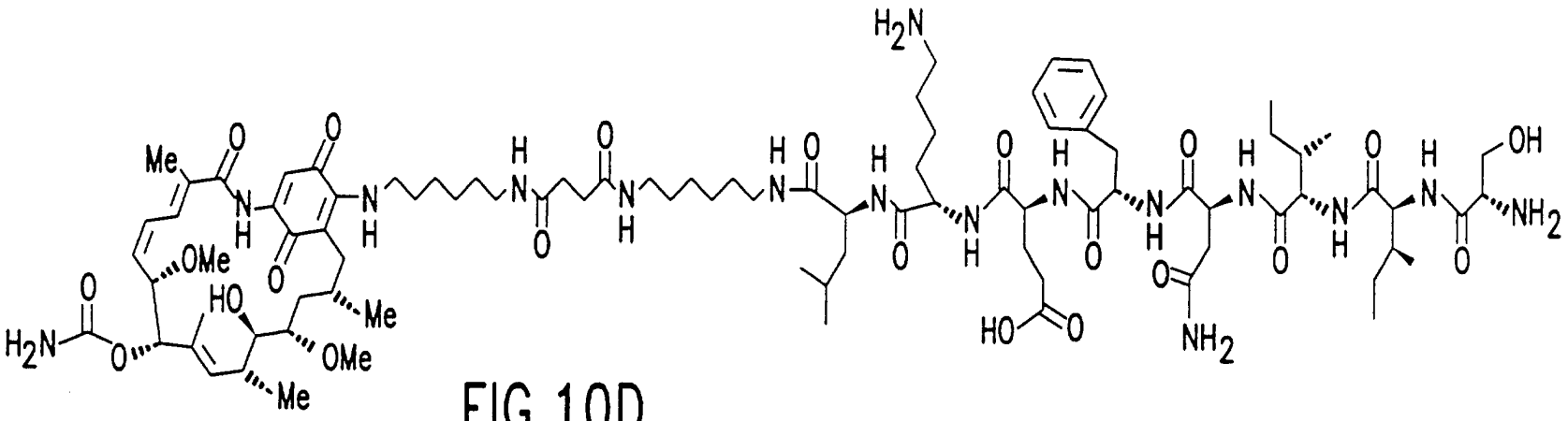


FIG.10D

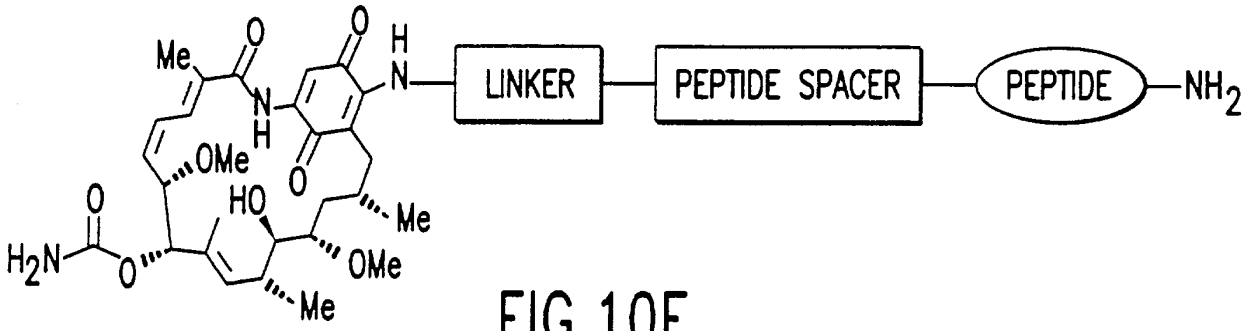


FIG.10E

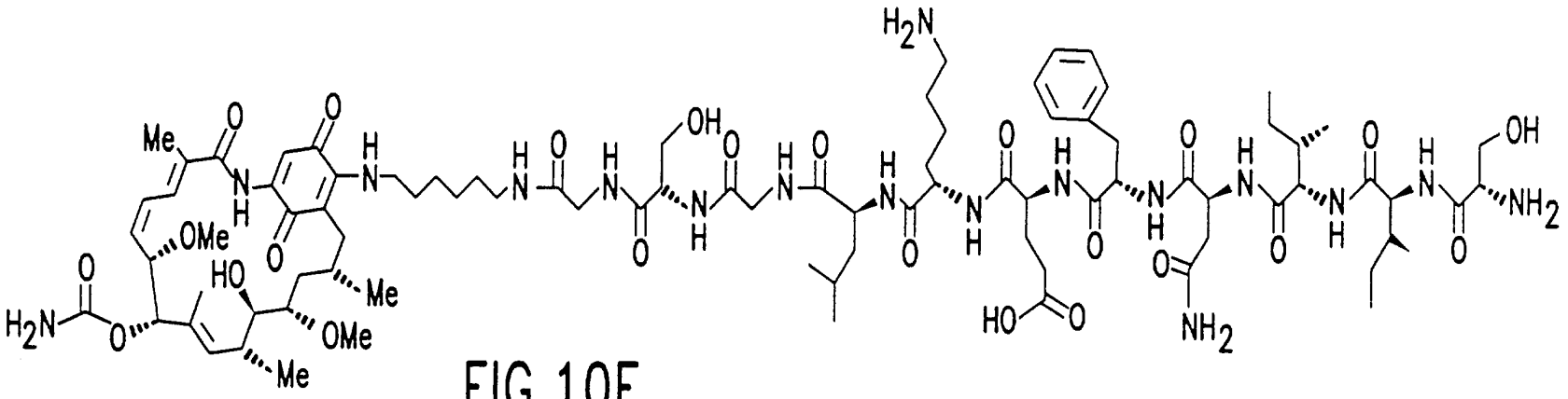


FIG.10F

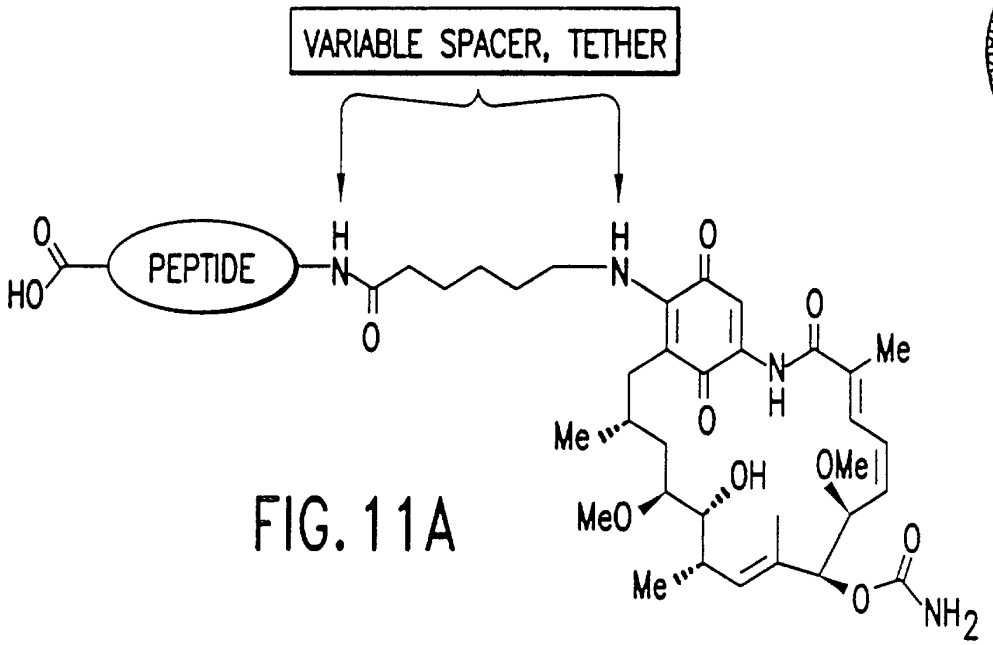


FIG. 11A

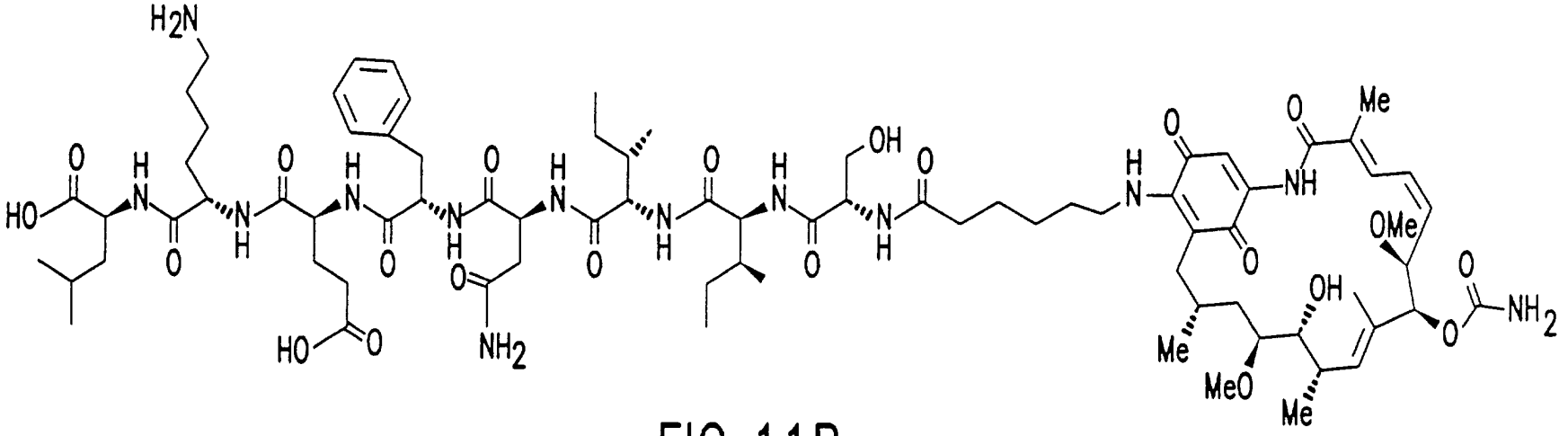


FIG. 11B

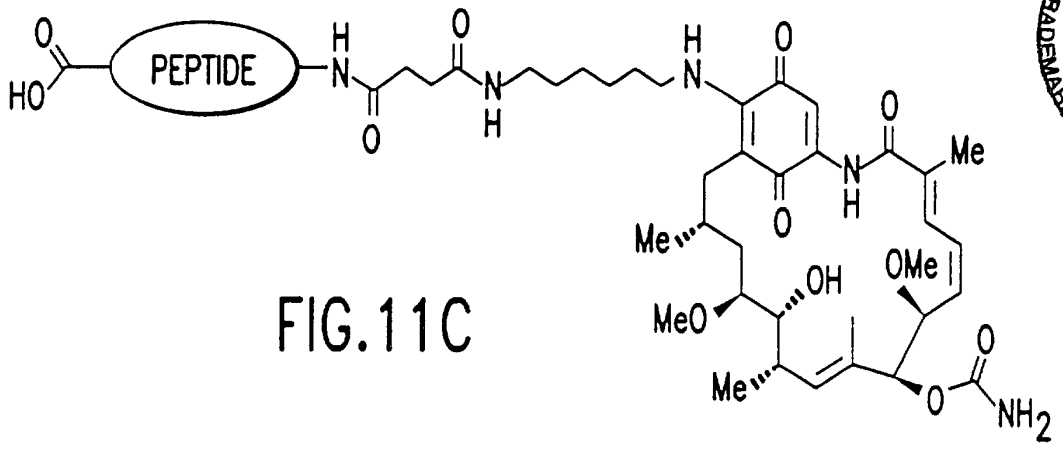


FIG.11C

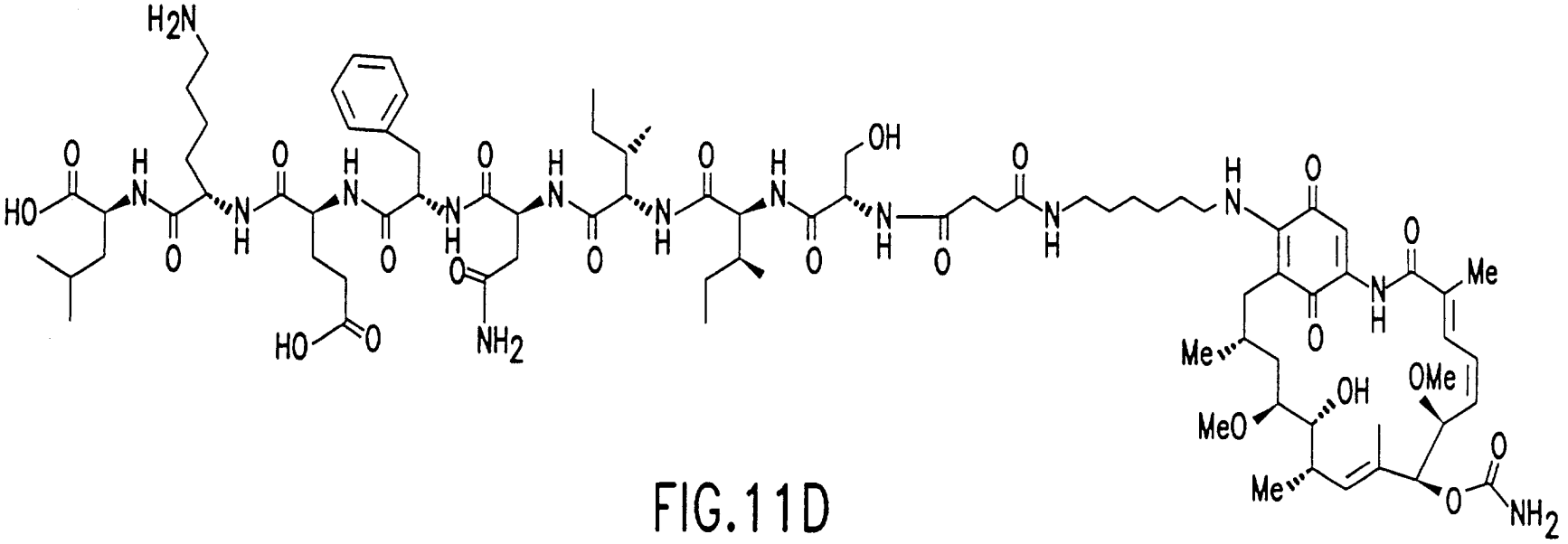


FIG.11D

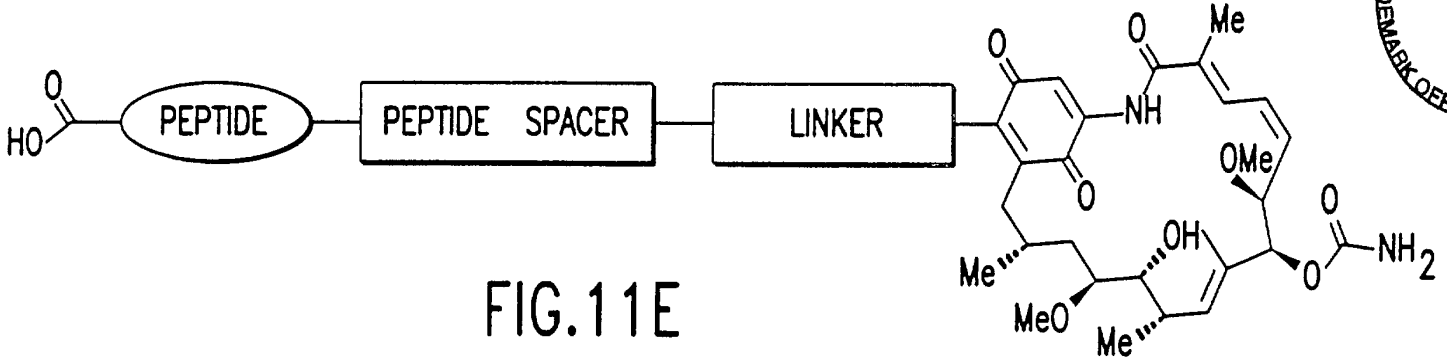


FIG.11E

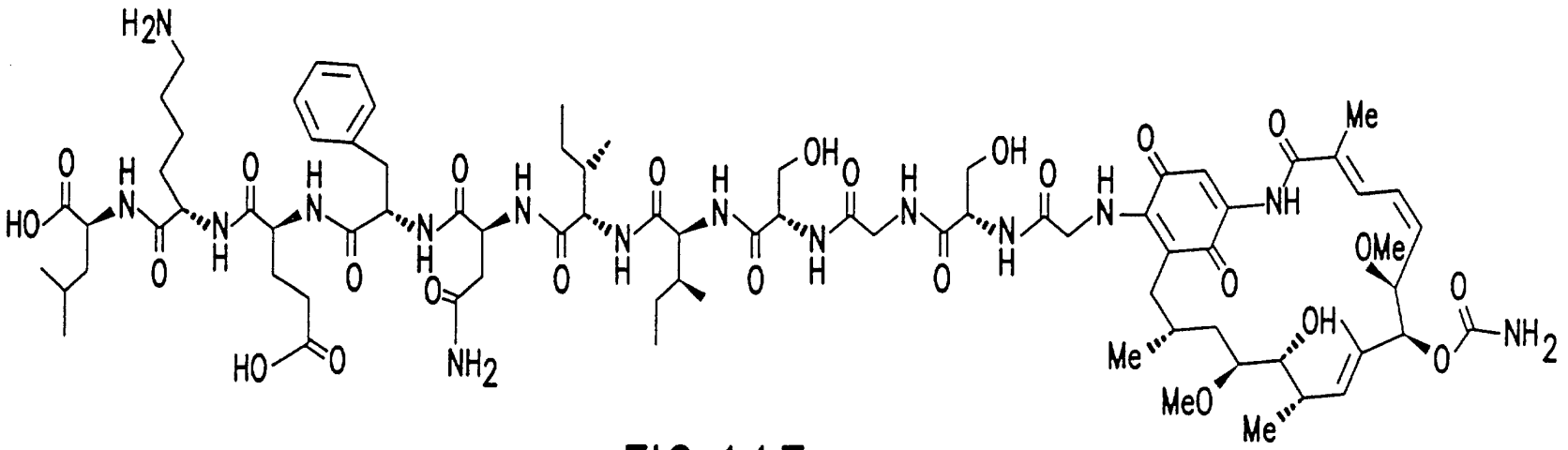


FIG.11F

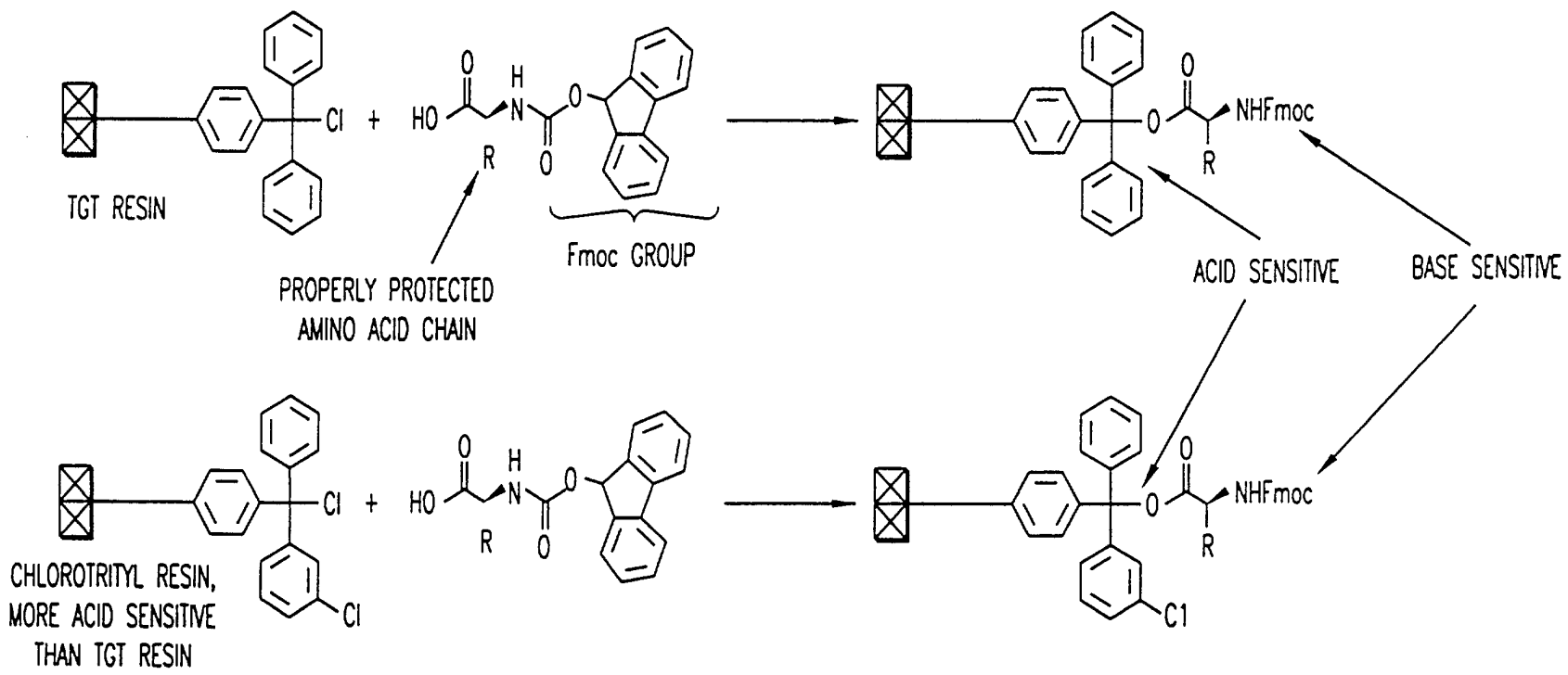


FIG. 12

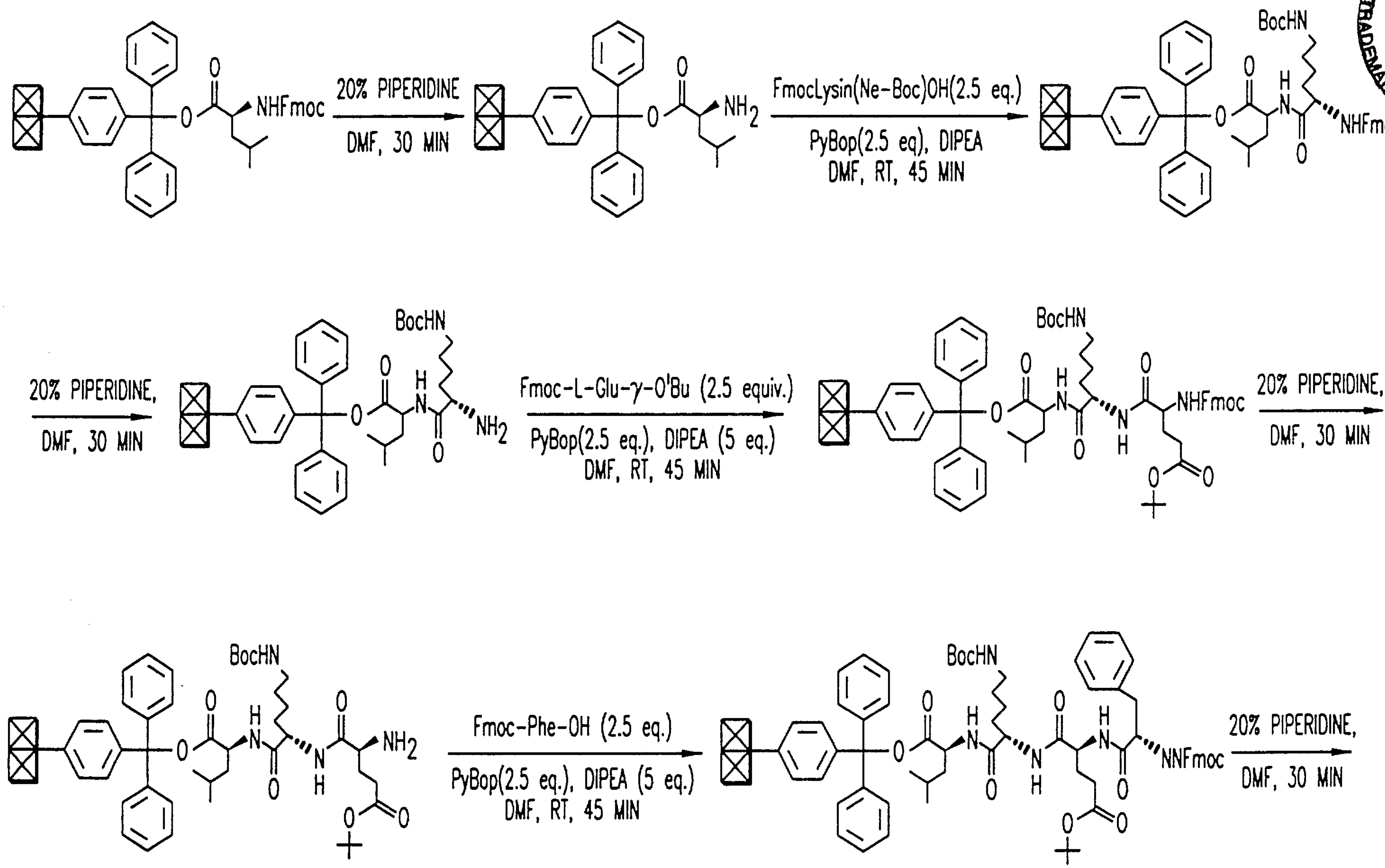
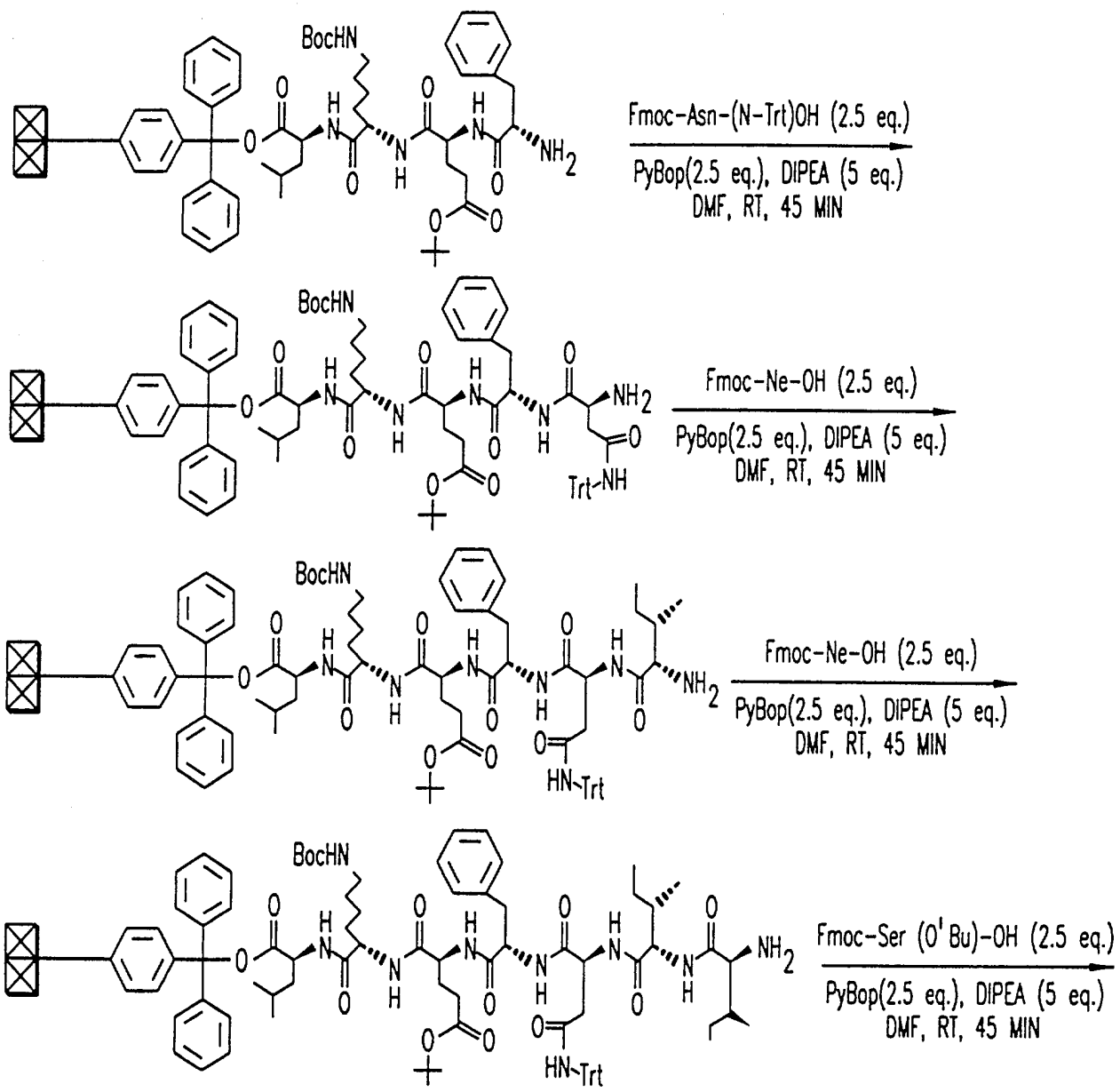


FIG.13A



CONTINUED ON FIG.13C

FIG. 13B

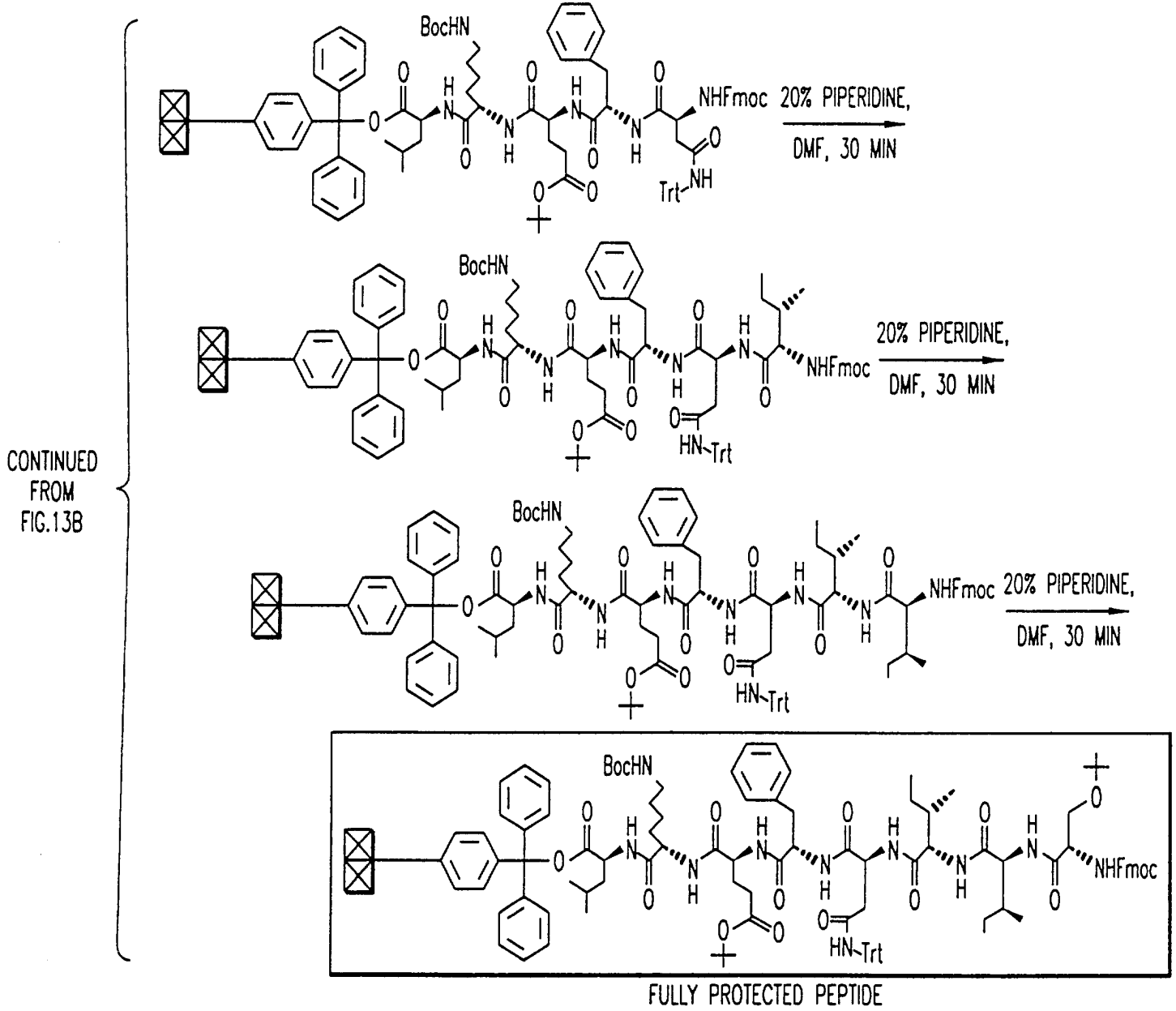


FIG. 13C

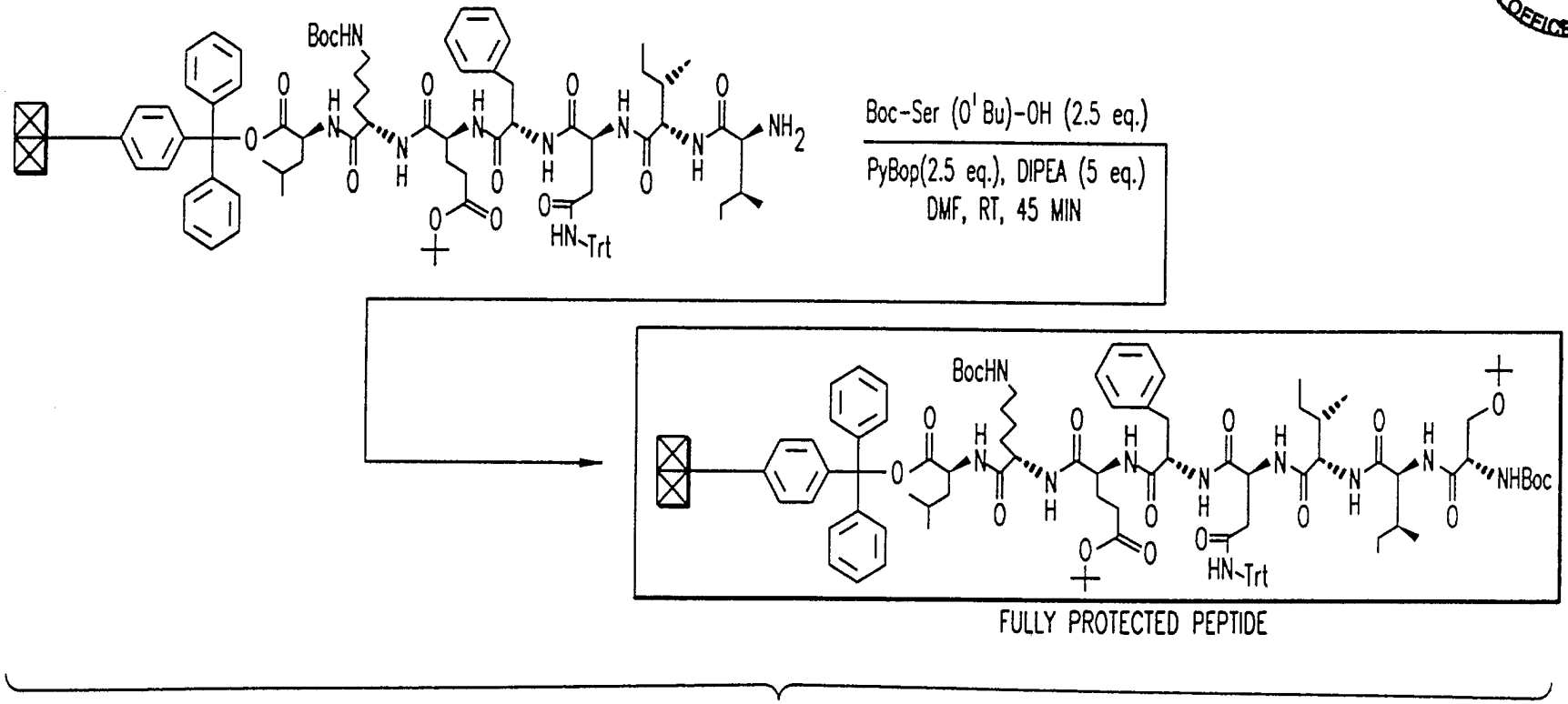


FIG.14A

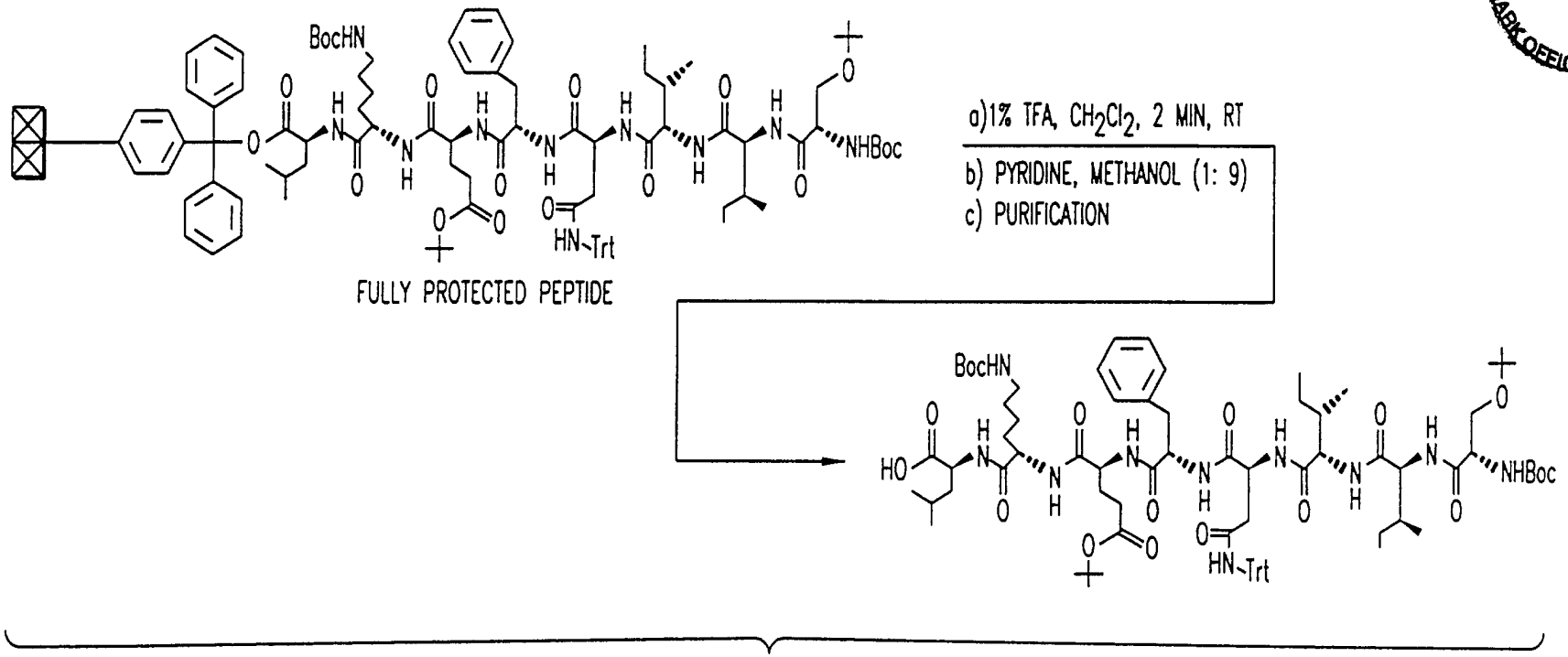


FIG.14B

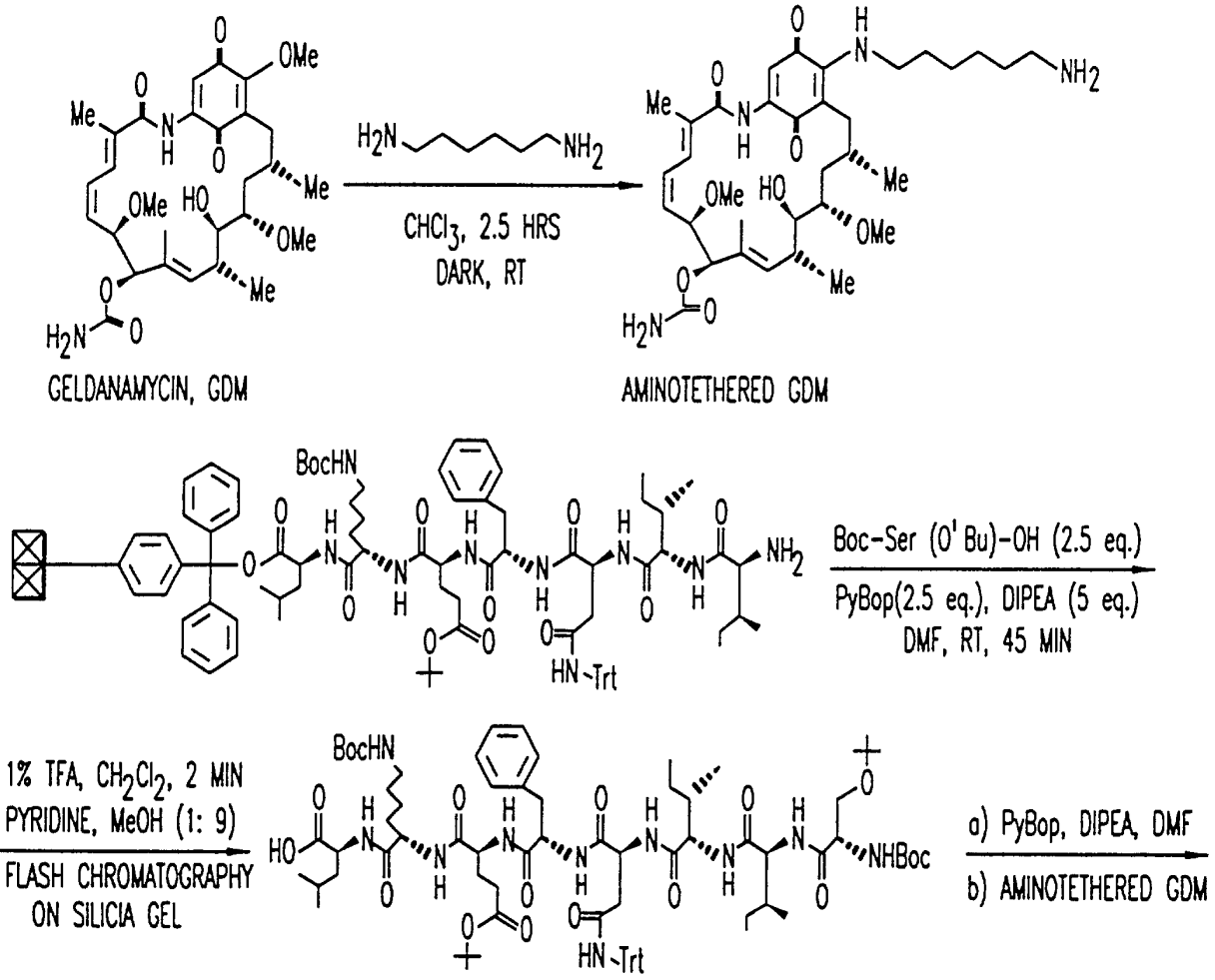


FIG.15A

CONTINUED FROM FIG.15A

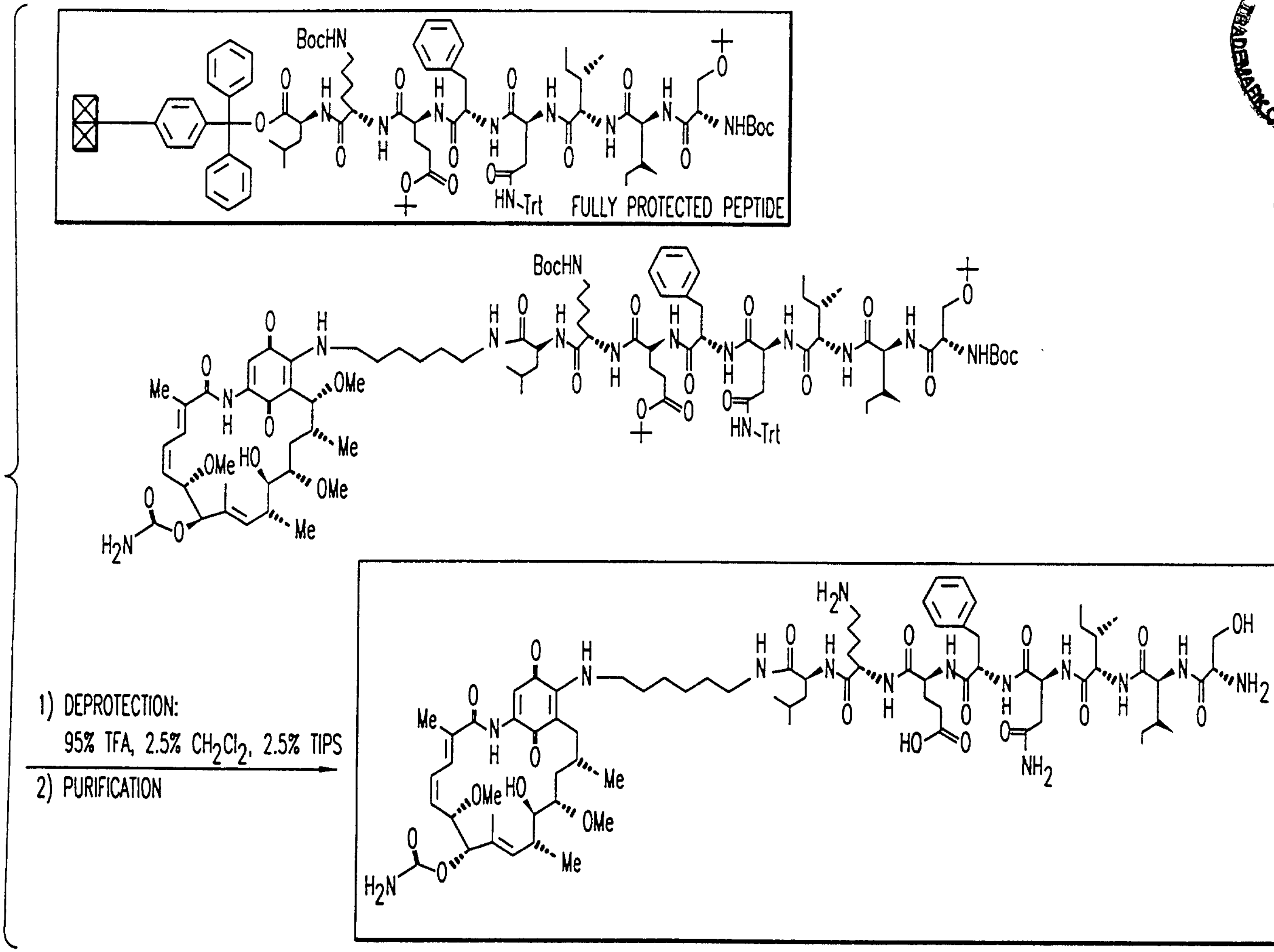


FIG.15B

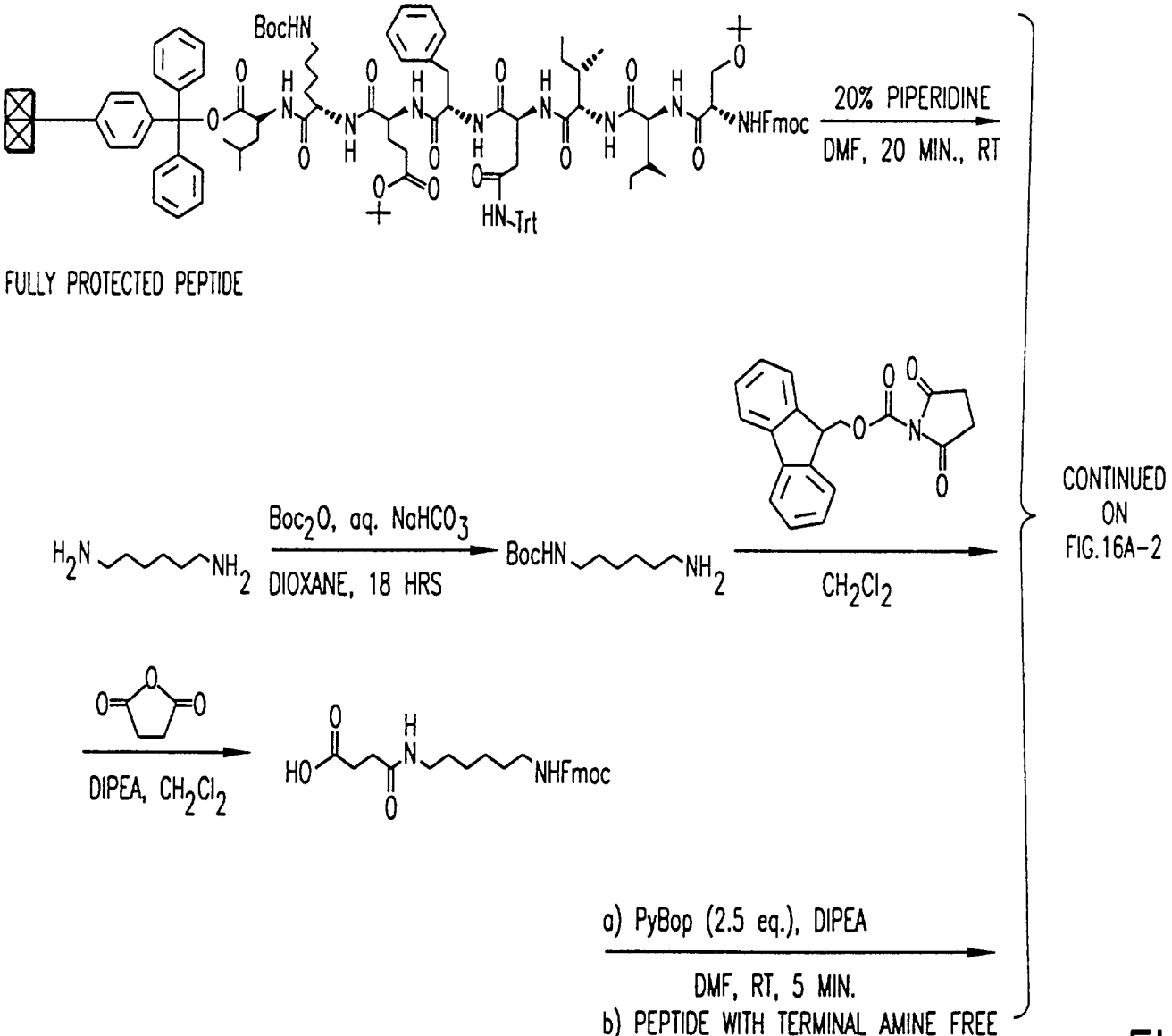
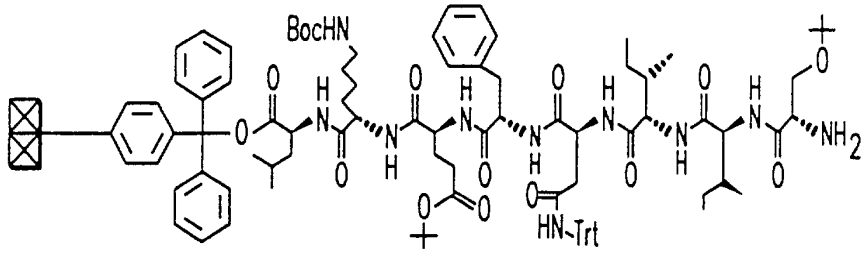
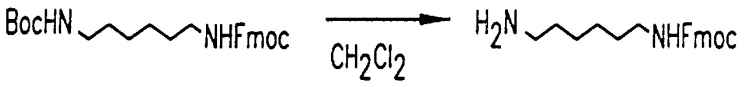


FIG. 16A-1

CONTINUED FROM FIG.16A-1



PEPTIDE WITH TERMINAL AMINE FREE



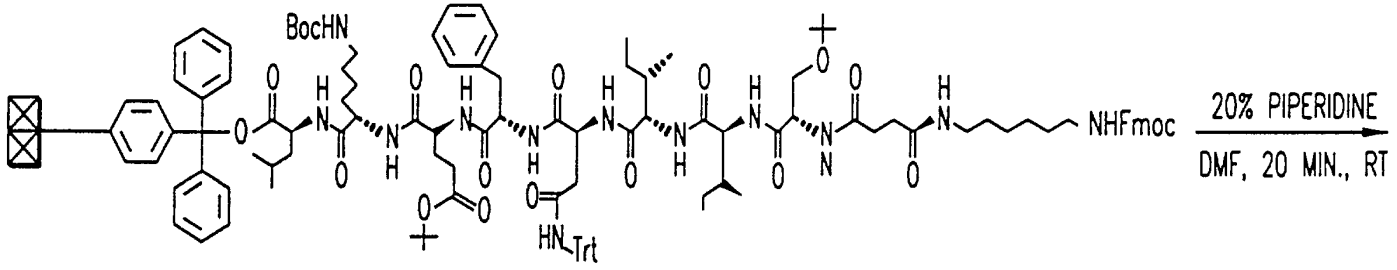


FIG.16A-2

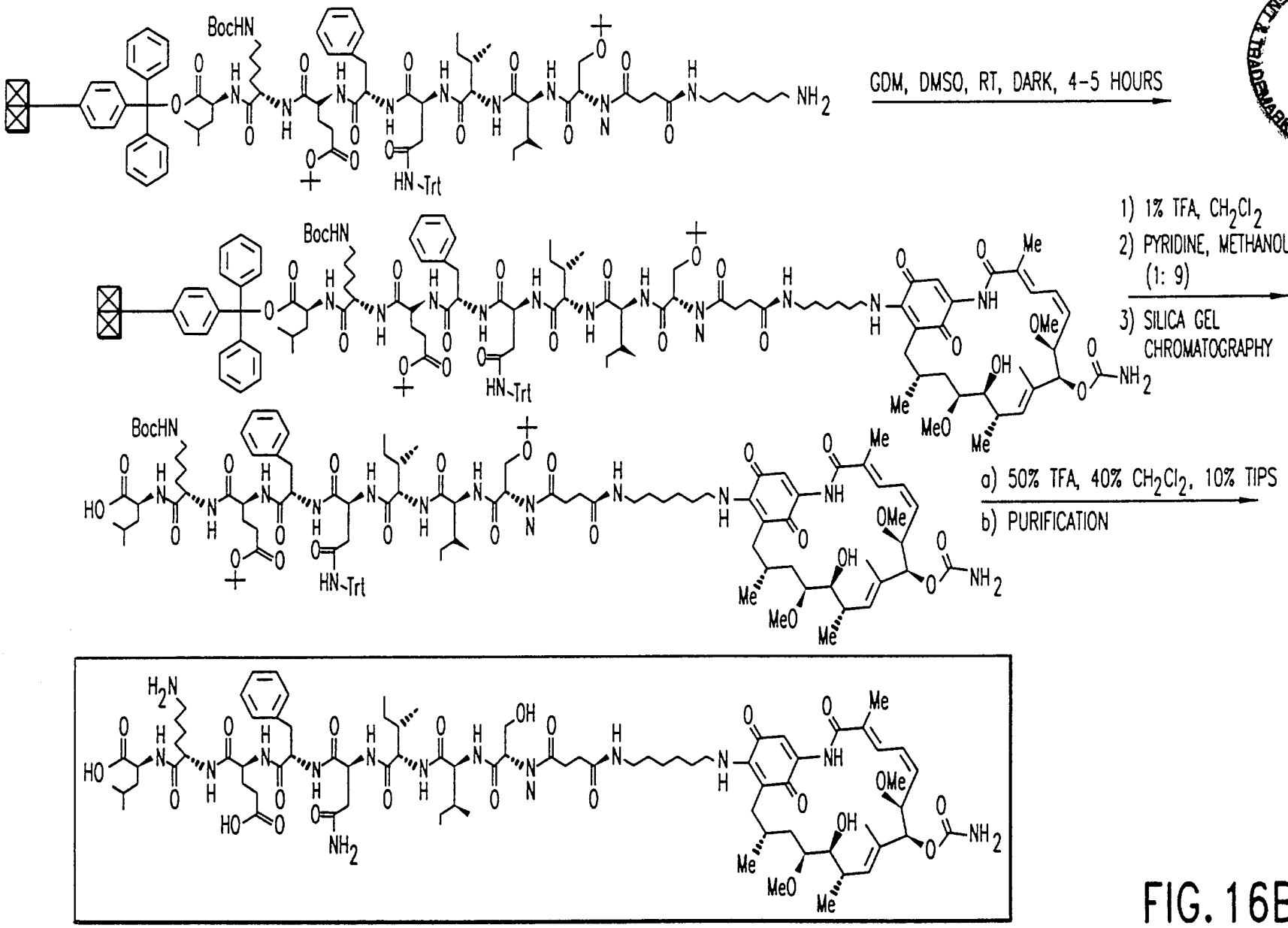

BocHN
HN-Trt
NH2
GDM, DMSO, RT, DARK, 4-5 HOURS
1) 1% TFA, CH2Cl2
2) PYRIDINE, METHANOL (1: 9)
3) SILICA GEL CHROMATOGRAPHY
a) 50% TFA, 40% CH2Cl2, 10% TIPS
b) PURIFICATION
HO
MeO
OMe
OH
Me
NH
O
H2N

FIG. 16B

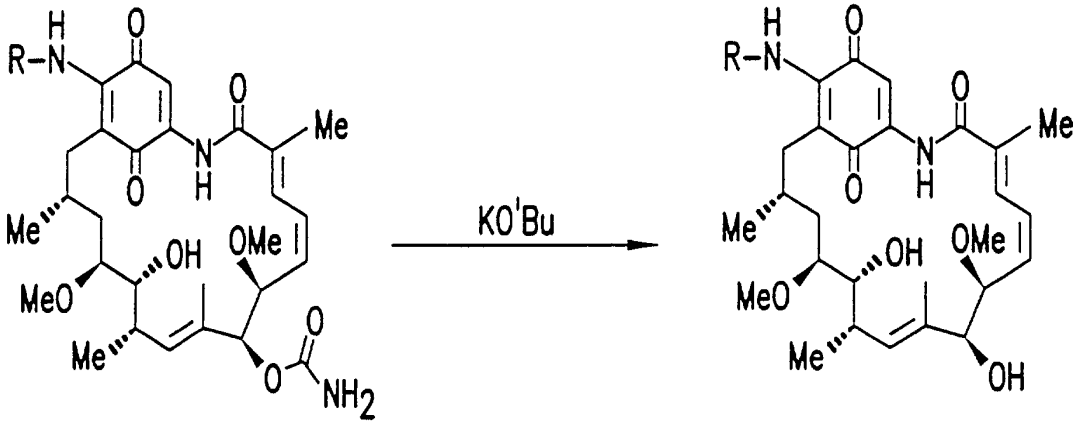


FIG. 17A

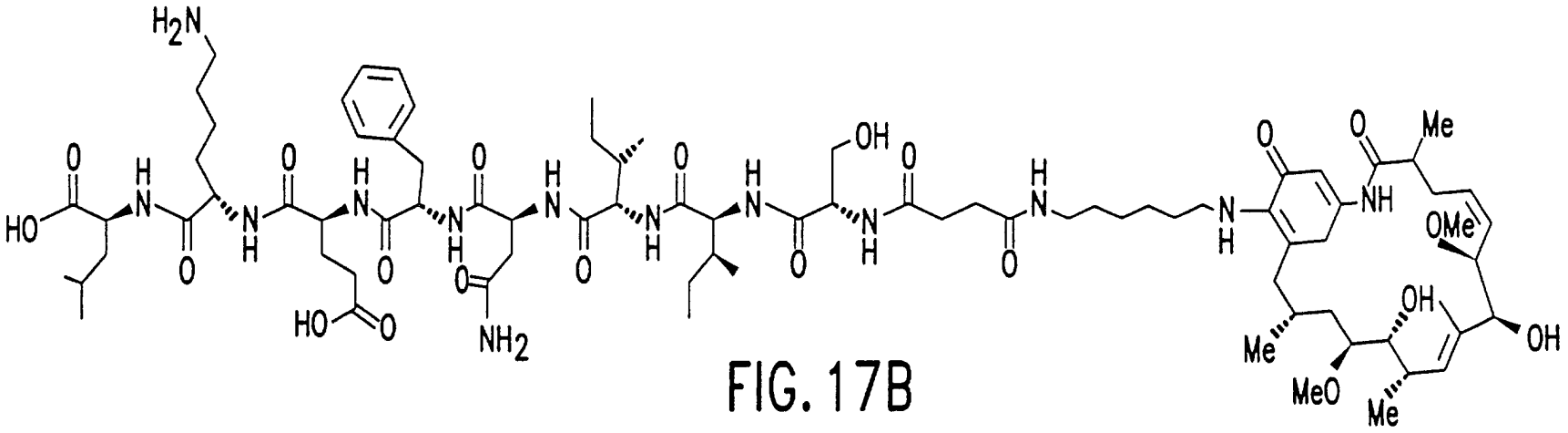


FIG. 17B

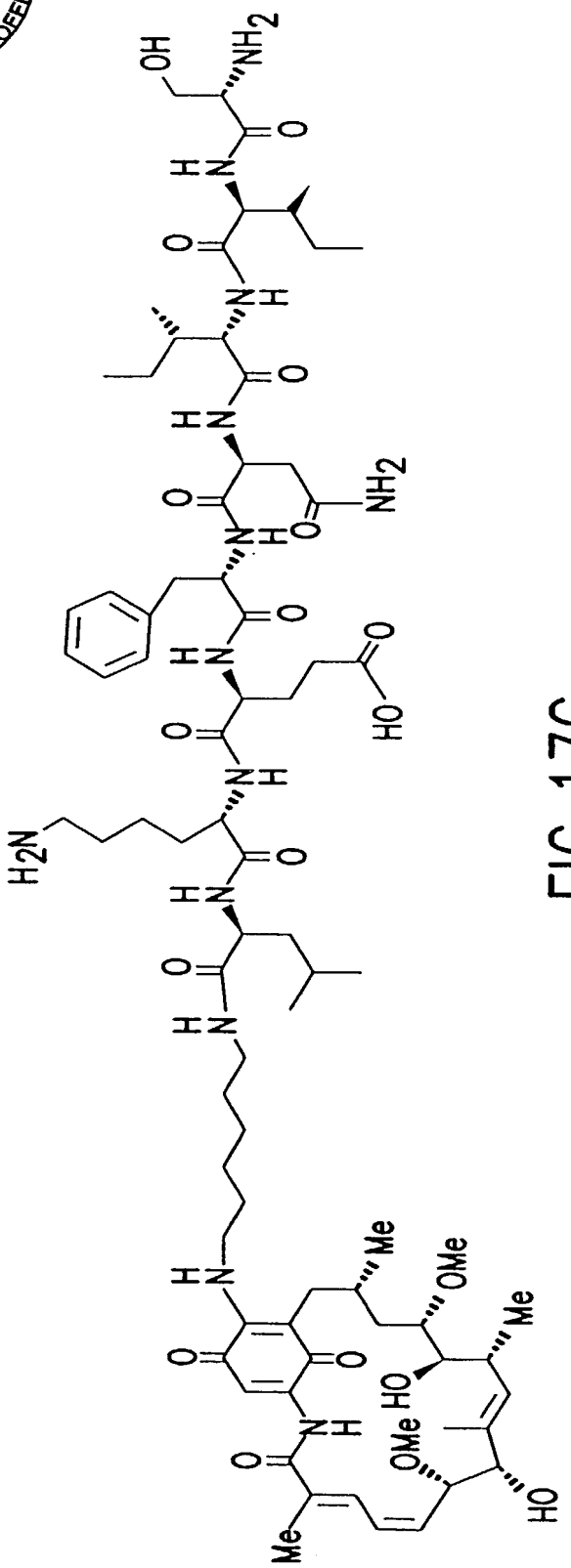


FIG. 17C

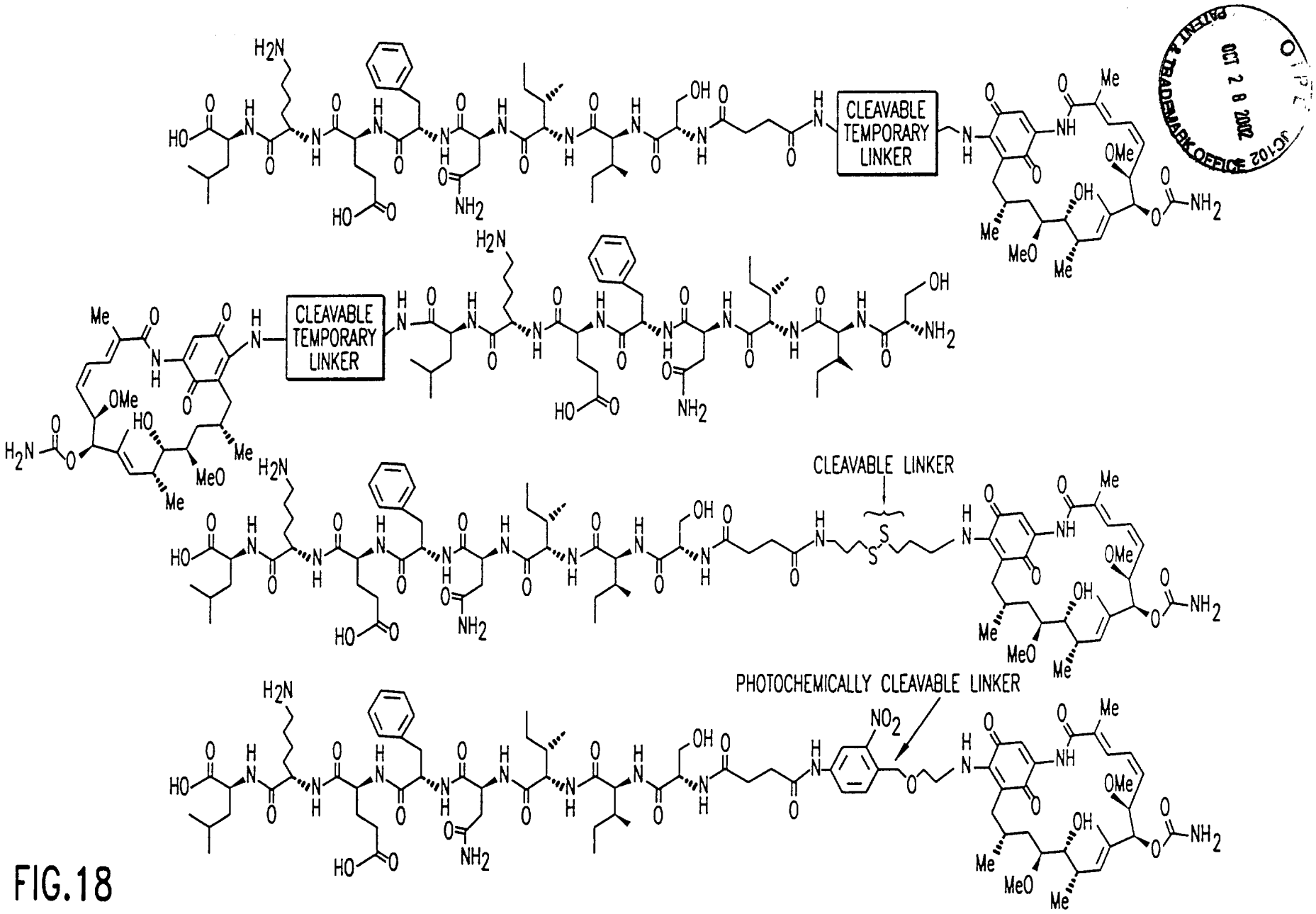


FIG.18

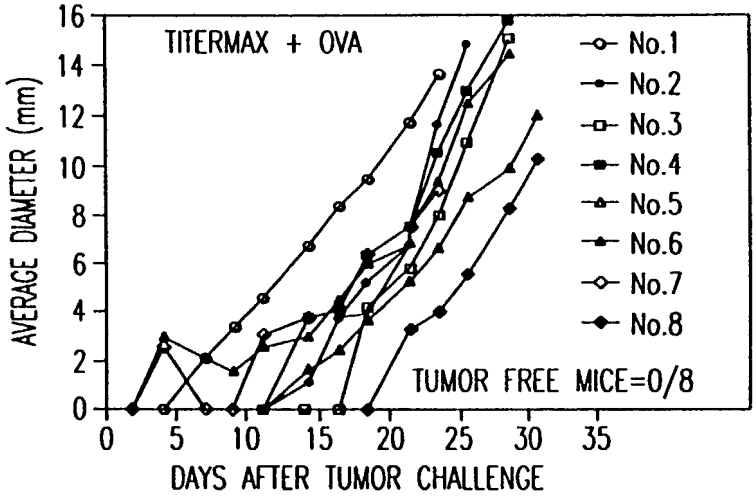


FIG.19A

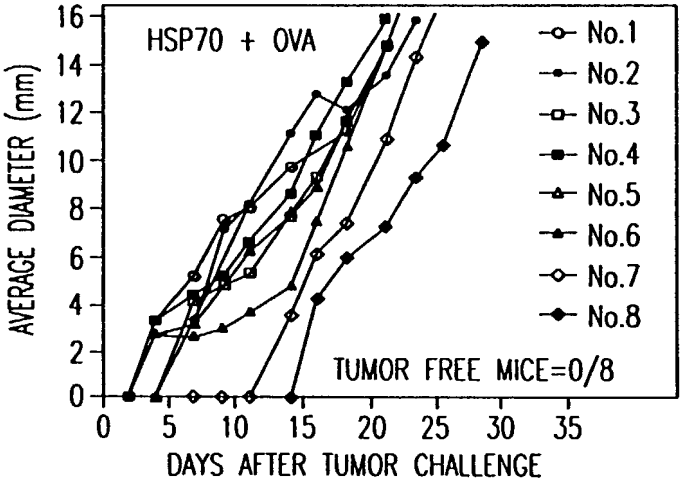


FIG.19B

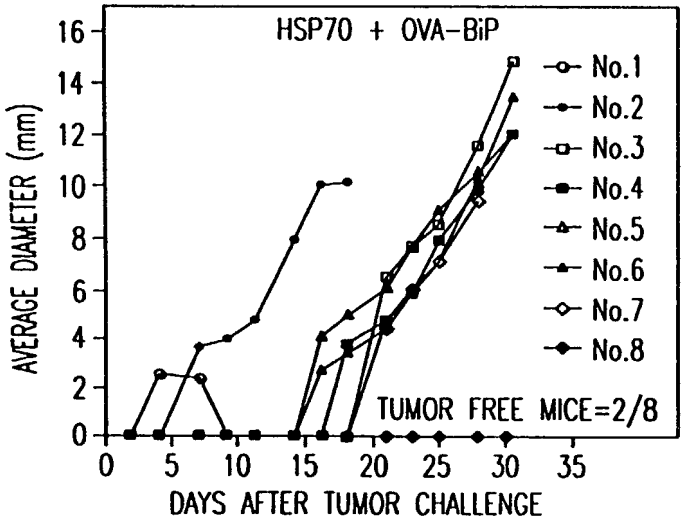


FIG.19C

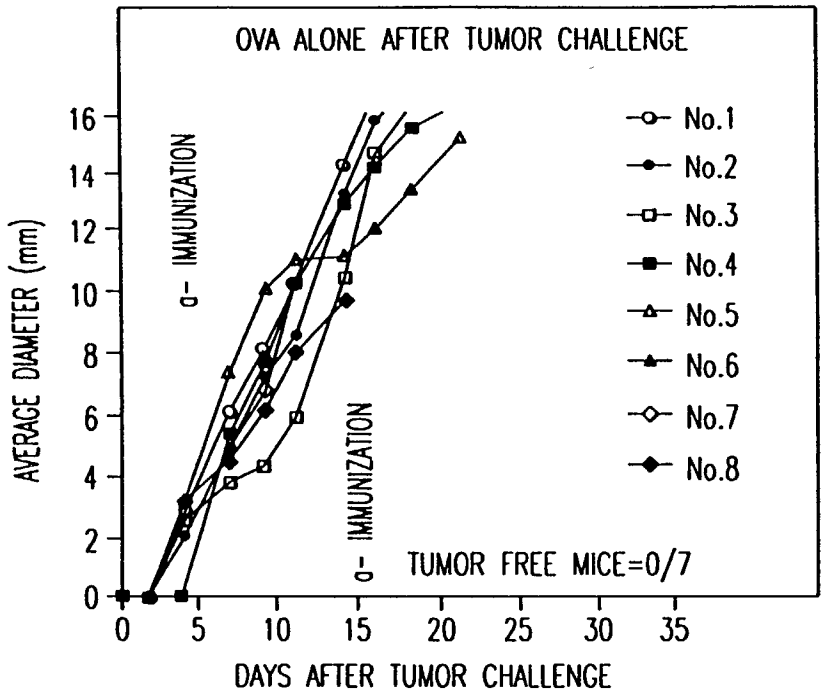


FIG.19D

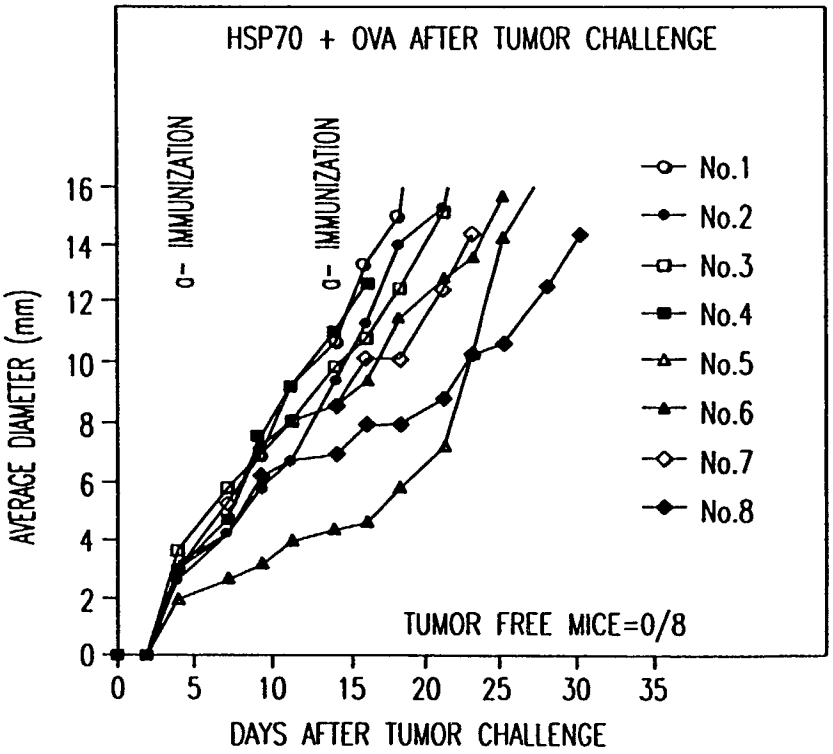


FIG.19E

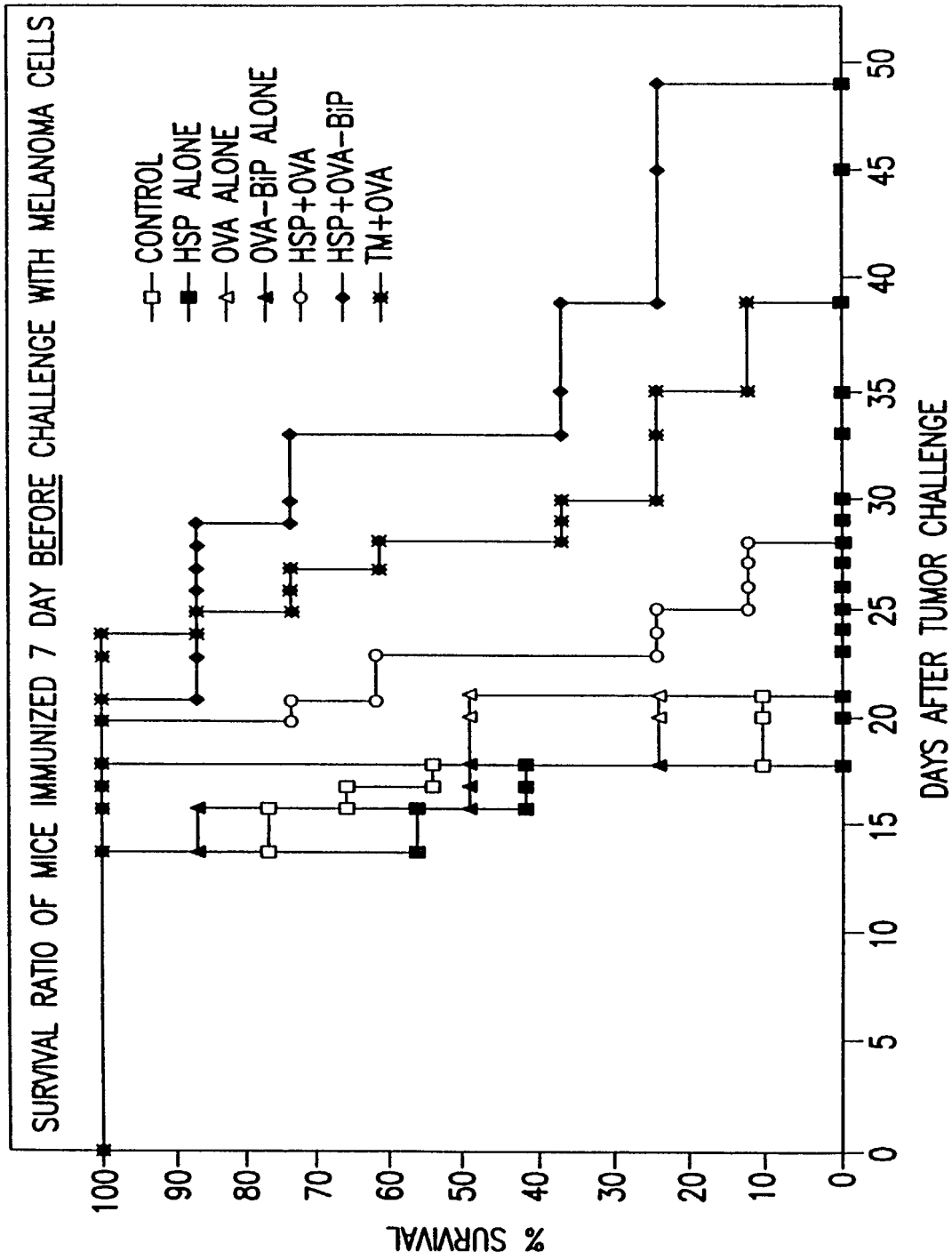


FIG.19F

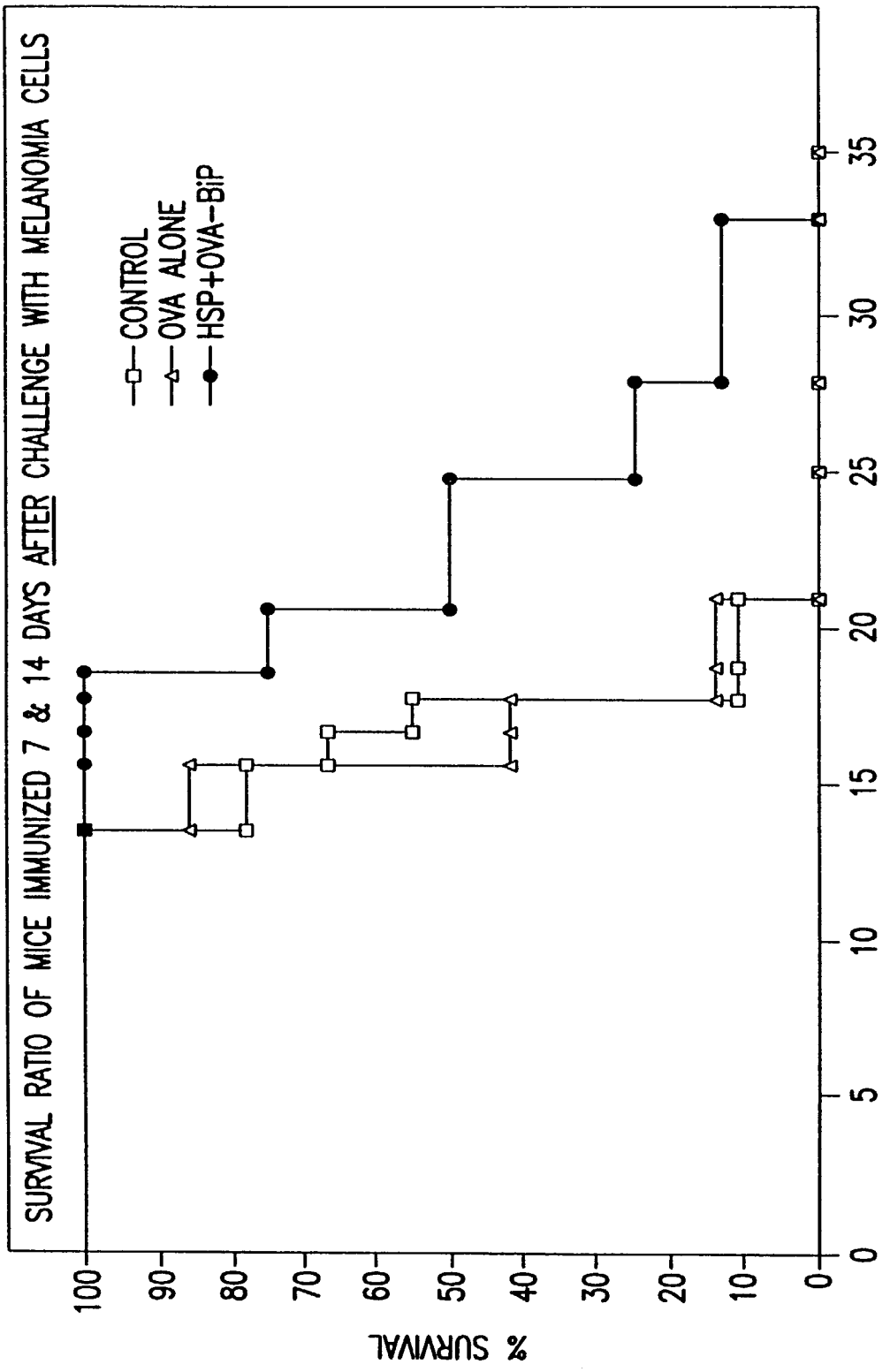


FIG. 19G